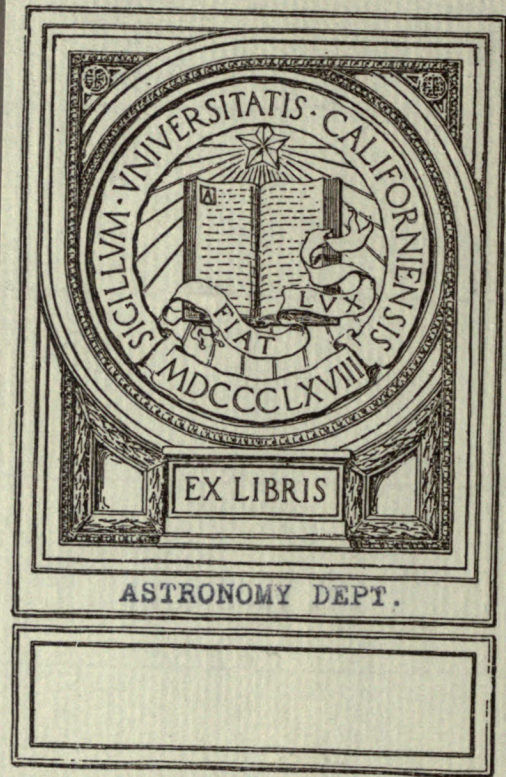


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ASTROGRAPHIC CATALOGUE  
1900·0.

HYDERABAD SECTION  
DEC.  $-16^{\circ}$  to  $-21^{\circ}$ .

Univ. of  
CALIFORNIA

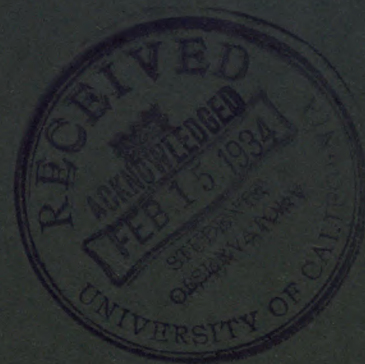
FROM PHOTOGRAPHS TAKEN AND MEASURED AT THE NIZAMIAH  
OBSERVATORY, HYDERABAD.

UNDER THE DIRECTION OF THE LATE  
R. J. POCOCK, B.A., B.Sc., F.R.A.S.

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VOL. III. - 19

MEASURES OF RECTANGULAR  
CO-ORDINATES AND DIAMETERS  
OF 58,743 STAR-IMAGES  
ON PLATES WITH CENTRES IN  
DEC.  $-19^{\circ}$



EDINBURGH:  
PRINTED FOR H.E.H. THE NIZAM'S GOVERNMENT  
By NEILL & CO., LIMITED, 212 Causewayside.  
1920.

*Price Rs. 12 or 16s. Net.*



TO VVVU  
AIRBORNE



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1900·0.

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## P R E F A C E.

THIS volume forms the third in the Hyderabad section of the Astrographic Catalogue undertaken by the late Mr R. J. Pocock at the Nizamiah Observatory. At the time of his lamented death, 1918 October 9, 161 plates out of the 180 belonging to this zone had been taken and measured. The remaining portion was subsequently completed under the supervision of the present writer; but the general plan drawn by Mr Pocock has been carefully followed throughout, so that the whole work may be regarded as published under the direction of the author. It is sad that, after bestowing so much earnest attention on this work, he could not see the final completion of his labours.

T. P. BHASKARAN.







## ERRATA.

### VOL. II. ZONE $-18^{\circ}$ .

PAGE

xiv. Personality of Measurers, *read*

A	445— 485	— 1	+ 1	5
	607— 1064	— 1	— 2	26

xx. Line 8, *for*  $\frac{1}{6}\mu(2Y^3+3X^2 \cdot Y \cdot \cos 2D)$   
*read*  $\frac{1}{6}\mu^2(2Y^3+3X^2 \cdot Y \cdot \cos 2D)$ .

10. No. 1940, *for* 4.434 *read* 5.434.

19. *for* No. 5366 *read* 5366\*.

### VOL. III. ZONE $-19^{\circ}$ .

24. *for* 7802 *read* 7802\*.

45. *for* 16347\* *read* 15347\*.

89. *for* 31033 *read* 31033\*.

168. 59769\*, *for* 0.003 *read* 10.003.

171. *for* 70826\* *read* 60826\*.

171. *for* 70789\* *read* 60789.

174. *for* 62975\* *read* 61975\*.







# HYDERABAD ASTROGRAPHIC CATALOGUE.

1900.

VOL. III.

## INTRODUCTION.

[A more detailed introduction is given in Vol. I. Only such portions are repeated as require modification from zone to zone.]

### I.—HISTORICAL SUMMARY.

The work on the present zone was commenced early in December 1916, and was completed in January 1919, when the last plate taken for this volume was measured. The work has thus been spread over nearly two years. The copy for press was sent to the printers as the measurement proceeded, so that by the time the last plate was completed, more than half the volume had been printed and passed for press.

As in the case of the previous zones, the strictest economy in time has been observed throughout the work on the present zone. The same considerations as were mentioned in the Introduction to Vol. II. p. vi. were constantly borne in mind, and have influenced decisions in minor details. At the same time every effort has been made to attain the same standard of accuracy as that obtained in other sections of the Astrographic Catalogue.

The following is a list of persons who have taken part in the work of this zone, with the initials by which they are denoted :—

Name.	Initials.	Name.	Initials.
R. J. Pocock . . . .	P.	Syed Ahmed . . . .	A.
T. P. Bhaskaran . . . .	B.	M. Anantanarayanan . . . .	N.
C. Hanmant Rao . . . .	H.	U. S. Raghavendra Rao . . . .	R.
D. R. Sripathi Rao . . . .	S.	M. Ahmedullah . . . .	M.A.
M. K. Bappu . . . .	M.	A. J. Govinda Raja . . . .	G.



In addition, V. Ramachandran, M. Vaidyanatha Sastri, and later H. S. Ramanna, have assisted in computations and reductions. M. Azimuddin and A. V. Bheema Rao have assisted in taking down the measures, preparing copy for press, and reading the proofs.

## II.—THE INSTRUMENT.

See Introduction to Vol. I. p. vi.

## III.—PHOTOGRAPHIC.

The plates for this zone have all been given at least two exposures, the telescope being slightly displaced in declination before the second exposure. The actual lengths of the exposures have varied with the quality of the plates, the primary exposure being not less than 12 m, and exceeding 20 m only in a few cases. The actual duration of the exposures given to each plate will be found in the table of details below. The exposures for plates taken prior to 1917 September 15 were timed with a mean time chronometer, and the intervals are therefore given in mean time; for plates taken later than this date, a sidereal chronometer was used, and the intervals for these plates are consequently given in sidereal time. The images of the longer exposure were measured in all cases except six, viz. :—

18 h 20 m ; 19 h 16 m ; 20 h 20 m ; 20 h 28 m ; 21 h 8 m ; 23 h 16 m.

when the images of the shorter exposure were measured, the longer being defective.

The following table will show the class of plate used and also the particular batch from which it came :—

Limiting Plates.	Class and Batch.
852- 880	Stella A 10412
882-1161	Stella A 10426
1162-1228	Rocket A 10454
1229-1269	Rocket D 10485
1270-1275	Stella A 294
1276-1309	Rocket D 10485

All the plates were developed with metol hydroquinone by Mr Bappu; but for plates with numbers between 1121 and 1188 monomet was used, and for those between 1189 and 1269 serchol was used as a substitute for metol. Plates between 1270 and 1286 were developed with metol alone without hydroquinone. As in



the previous zones, no special effort was taken to secure large numbers of stars in the richer regions; but in the poorer regions reasonable effort has been made to obtain a good number of stars on each plate. There are only a few plates containing less than 150 stars, and none less than 100.

The ratio of the number of stars on each plate to the number shown on the corresponding region of Schönfeld's map has also been used as a criterion. There are only two plates for which a ratio of two (equivalent to 2.5 times Argelander) has not been attained, and for more than 60 per cent. of the plates a ratio of three or more has been attained. The average number of stars per plate is 326.

The different réseaux used for plates in this zone are given in the following list:—

Réseau.	Plates.	Value of One Interval.
		mm.
Oxford No. V. Gautier . . . . .	852-1139 } 1169-1228 }	5.04
National Physical Laboratory . . . . .	1140-1168	5.04
Kodaikanal Gautier . . . . .	1229-1297	5.00

The Oxford réseau No. V has the line  $y=3$  displaced. For 141 plates out of 180 in Zone—19°, this réseau has been used, the measures being corrected for the error (see errors of réseau below); as it is ruled to suit the focal length of the Oxford telescope, its use involves a scale value correction of .02500 approximately to the measured co-ordinates.

The réseau made at the National Physical Laboratory was used only for seven plates in this zone. The lines are clearly cut, but they are not rectangular; this error is automatically corrected by the plate constants, and on this account the sum of the two orientation constants ( $B+D$ ) for the plates with this réseau is a small positive quantity instead of zero.

In June 1918, the Director of the Kodaikanal Observatory kindly sent a Gautier réseau which was immediately brought into use. This réseau is ruled to the standard scale (value of one réseau interval=5.00 mm.), and as the focal length of the Hyderabad Astrographic telescope requires a spacing of approximately 4.985 mm., this involves scale value corrections of about —.01750 times the measured co-ordinates. This réseau was used for 32 plates in this zone.

The réseau was imprinted on the plates just before development, by exposure to an electric light at a distance of 18 feet, the réseau and plate being separated by an edging of moderately thick paper.

The following table gives the particulars of the plates in the present volume.

The first column gives the number of the plate in the Hyderabad series.



The second column gives the fraction of the year corresponding to the (astronomical) day on which the exposure was made to three decimal places.

The third column gives the approximate R.A. of the plate centre.

The fourth column gives the hour angle of the plate centre corresponding to the middle of the exposure which was subsequently measured; clock corrections have been applied where they amounted to one minute or more.

The fifth column gives the duration of the exposures (in mean time except for plates taken after 1917.704, which are in sidereal time); the image of the longer exposure was measured in all cases except six, viz. :—

18 h 20 m; 19 h 16 m; 20 h 20 m; 20 h 28 m; 21 h 8 m; 23 h 16 m.

The sixth column indicates the observer who guided the telescope; a second observer was always present to assist in setting the instrument, etc. The signification of the different initials is explained above.

The seventh column shows which of the measuring instruments was used. Each measurer used the same instrument throughout. In Nos. 1 and 2 the plates of the southern zones have to be measured with the glass side up.

The eighth column gives the initials of the measurer. Each plate was measured throughout in both positions by one measurer.

The ninth column gives the number of stars measured.

The tenth column shows the ratio of the numbers measured to the number of stars shown in the corresponding area of Schönfeld's map.

The eleventh column gives the number of stars in the corresponding regions of the Astronomische Gesellschaft Catalogue (Algiers) for 1900.0.

*List of Plates in Zone —19°.*

No. of plate.	Year and fraction, 1900+.	R.A. of centre.		Hour angle.		Exposures.	Observer.	Instrument.	Measurer.	No. of stars.	Ratio to Schönfeld.	No. in A.G.C. (Algiers).
		h	m	h	m	m						
894	16.956	0	4	0	9 W.	12 6	R.	4	M.	207	3.1	23
888	16.956		12	0	5 E.	12 6	B.	1	R.	196	3.9	21
857	16.909		20	0	28 W.	12 6	A.	3	A.	199	3.1	13
882	16.947		28	0	3 W.	12 6	S.	1	S.	165	3.1	21
889	16.953		36	0	11 W.	12 6	S.	3	N.	151	2.6	13
885	16.950		44	0	9 E.	12 6	A.	4	M.	171	3.2	19
895	16.956	0	52	0	2 E.	12 6	N.	1	R.	142	2.2	20
901	16.958	1	0	0	30 E.	12 6	A.	3	A.	174	3.4	17
908	16.961		8	0	34 E.	12 6	B.	1	S.	167	3.1	16
902	16.958		16	0	18 E.	12 6	H.	4	M.	213	3.5	20
887	16.950		24	0	8 W.	12 6	P.	1	S.	141	2.1	21
909	16.961	1	32	0	29 E.	12 6	S.	1	R.	160	2.5	17



*List of Plates in Zone —19° (continued).*

No. of plate.	Year and fraction, 1900+.	R.A. of centre.		Hour angle.		Exposures.		Observer.	Instru-ment.	Measurer.	No. of stars.	Ratio to Schönfeld.	No. in A.G.C. (Algiers.)
		h	m	h	m	m	m						
891	16.953	1	40	0	11 W.	12	6	S.	3	A.	151	2.7	19
1161	17.928		48	0	1 E.	12	6	P.	3	N.	122	2.0	19
903	16.958	1	56	0	31 E.	12	6	A.	4	M.	181	2.6	16
892	16.953	2	4	0	15 W.	12	6	B.	1	R.	134	2.8	24
1171	18.003		12	1	6 W.	20	12	M.	3	N.	210	3.4	16
852	16.906		20	0	1 W.	12	6	N.	3	A.	187	3.6	8
904	16.958		28	0	24 E.	12	6	H.	1	R.	167	2.8	13
873	16.914		36	0	1 E.	12	6	H.	1	S.	209	3.0	21
860	16.909		44	0	10 E.	12	6	A.	4	M.	213	3.8	22
898	16.956	2	52	0	10 E.	12	6	R.	3	A.	174	2.3	15
893	16.953	3	0	0	14 E.	12	6	S.	1	S.	169	2.4	23
905	16.958		8	0	35 E.	12	6	A.	4	M.	241	3.0	27
861	16.909		16	0	11 E.	12	6	A.	1	R.	256	4.2	18
899	16.956		24	0	9 E.	12	6	N.	3	A.	187	2.7	26
875	16.914		32	0	7 W.	12	6	H.	4	M.	230	4.0	12
876	16.914		40	0	27 W.	12	6	A.	3	A.	215	3.0	22
853	16.906		48	0	48 E.	12	6	R.	1	S.	270	3.5	23
854	16.906	3	56	0	15 E.	12	6	N.	2	M.A.	248	3.0	28
862	16.909	4	4	0	29 E.	12	6	A.	1	R.	301	4.0	30
869	16.912		12	0	36 E.	12	6	S.	3	A.	330	3.9	24
877	16.914		20	0	17 W.	12	6	H.	3	N.	316	3.8	28
900	16.956		28	0	34 E.	12	6	R.	1	R.	242	2.8	25
906	16.958		36	1	28 E.	12	6	H.	1	S.	249	3.4	26
870	16.912		44	0	35 E.	12	6	S.	1	R.	365	4.5	18
878	16.914	4	52	0	18 W.	12	6	A.	3	A.	441	5.3	22
913	16.961	5	0	1	31 E.	12	6	S.	1	S.	298	3.9	23
879	16.914		8	0	31 W.	12	6	H.	2	M.A.	341	4.9	16
914	16.961		16	1	18 E.	12	6	B.	1	S.	310	3.3	23
915	16.961		24	0	44 E.	12	6	S.	1	S.	423	4.7	28
916	16.964		32	1	44 E.	12	6	A.	1	R.	506	6.0	30
917	16.964		40	1	23 E.	12	6	N.	4	M.	474	5.4	31
872	16.912		48	0	10 E.	12	6	S.	1	S.	504	5.4	27
918	16.964	5	56	1	8 E.	12	6	A.	3	A.	570	5.3	28
880	16.914	6	4	0	7 W.	12	6	A.	4	M.	744	7.2	23
919	16.964		12	0	56 E.	12	6	N.	1	R.	502	5.3	31
928	16.969		20	1	47 E.	12	6	S.	4	M.	574	5.4	36
931	16.972		28	1	38 E.	12	6	B.	3	A.	479	4.4	32
930	16.972		36	2	14 E.	12	6	A.	3	A.	684	5.7	40
932	16.972		44	1	26 E.	12	6	A.	4	M.	773	6.5	49
933	16.972	6	52	1	7 E.	12	6	B.	1	R.	889	6.8	42
934	16.972	7	0	0	44 E.	12	6	A.	3	A.	1041	6.4	46
943	17.044		8	0	25 E.	12	6	S.	1	R.	1192	7.4	58
947	17.047		16	1	39 E.	12	6	A.	1	S.	1301	8.3	43
948	17.047		24	1	14 E.	12	6	A.	3	A.	1616	10.2	42
949	17.047		32	0	49 E.	12	6	G.	4	M.	1177	7.2	43
951	17.052		40	0	45 E.	12	6	S.	3	N.	975	6.2	43
950	17.052		48	1	24 E.	12	6	H.	1	S.	886	5.2	41
952	17.052	7	56	0	34 E.	12	6	H.	1	R.	1110	7.4	37
953	17.052	8	4	0	6 W.	12	6	S.	3	A.	889	5.4	40
956	17.058	8	12	2	8 E.	12	6	A.	4	M.	770	5.0	44



*List of Plates in Zone —19° (continued).*

No. of plate.	Year and fraction, 1900+.	R.A. of centre.		Hour angle.		Exposures.	Observer.	Instru-ment.	Measurer.	No. of stars.	Ratio to Schönfeld.	No. in A.G.C. (Algiers).
		h	m	h	m	m						
957	17·058	8	20	1	48 E.	12 6	A.	3	N.	616	4·3	38
954	17·052		28	0	10 W.	12 6	H.	3	A.	587	4·8	46
958	17·058		36	1	34 E.	12 6	A.	1	R.	684	7·2	34
959	17·058		44	1	13 E.	12 6	A.	3	A.	363	4·4	27
960	17·058	8	52	0	50 E.	12 6	A.	3	N.	345	3·6	25
961	17·058	9	0	0	28 E.	12 6	A.	2	M.A.	260	2·9	25
955	17·052		8	0	2 E.	12 6	S.	1	R.	356	3·6	32
972	17·121		16	1	48 E.	12 6	H.	1	S.	333	3·8	25
973	17·121		24	1	19 E.	12 6	A.	3	A.	400	4·2	25
967	17·118		32	1	44 E.	12 6	G.	2	M.A.	234	2·5	26
977	17·123		40	2	5 E.	12 6	B.	1	S.	255	2·6	27
978	17·123		48	1	41 E.	12 6	B.	4	M.	260	3·5	25
983	17·126	9	56	2	19 E.	12 6	R.	1	R.	288	4·1	16
979	17·123	10	4	1	11 E.	12 6	G.	2	M.A.	217	2·7	28
984	17·126		12	2	6 E.	12 6	A.	3	A.	322	3·8	24
985	17·126		20	1	45 E.	12 6	R.	3	N.	281	2·9	25
987	17·129		28	0	43 E.	12 6	S.	4	M.	251	3·1	20
992	17·131		36	1	5 E.	12 6	A.	1	R.	263	3·6	19
986	17·129		44	1	28 E.	12 6	H.	2	M.A.	179	2·3	21
988	17·129	10	52	0	21 E.	12 6	H.	3	A.	229	3·2	29
989	17·129	11	0	0	1 E.	12 6	S.	3	N.	243	3·2	21
990	17·129		8	0	22 W.	12 6	H.	4	M.	246	3·3	31
991	17·129		16	0	42 W.	12 6	S.	1	S.	233	3·4	18
1010	17·211		24	0	32 E.	12 6	A.	3	A.	150	2·1	24
994	17·131		32	0	58 E.	12 6	A.	1	R.	183	3·2	22
995	17·131		40	0	32 E.	12 6	G.	3	N.	171	2·2	17
1011	17·211		48	1	1 E.	12 6	S.	4	M.	183	2·4	23
996	17·131	11	56	0	21 E.	12 6	G.	3	A.	211	2·9	22
1012	17·211	12	4	0	50 E.	12 6	A.	2	M.A.	143	1·8	27
1017	17·216		12	0	29 E.	12 6	R.	4	M.	183	2·3	20
1013	17·211		20	0	36 E.	12 6	S.	1	R.	148	2·5	20
1018	17·216		28	0	12 E.	12 6	S.	3	N.	203	2·9	21
1019	17·216		36	0	10 W.	12 6	R.	4	M.	174	2·1	26
1027	17·288		44	1	7 E.	12 6	S.	3	A.	150	2·0	26
1028	17·288	12	52	0	45 E.	12 6	R.	3	A.	133	2·0	24
1031	17·290	13	0	0	53 E.	12 6	A.	1	S.	137	2·9	24
1020	17·216		8	0	9 W.	12 6	S.	4	M.	195	3·5	22
1029	17·288		16	0	41 E.	12 6	H.	3	N.	142	2·7	13
1030	17·288		24	0	17 E.	12 6	R.	3	A.	140	2·2	18
1039	17·298		32	0	53 E.	12 6	B.	1	R.	172	2·7	16
1021	17·216		40	0	6 W.	12 6	R.	1	S.	177	2·9	16
1032	17·290		48	1	9 E.	12 6	A.	4	M.	199	2·5	19
1033	17·296	13	56	1	0 E.	12 6	R.	3	N.	193	2·6	13
1022	17·216	14	4	0	12 W.	12 6	S.	3	A.	212	3·5	17
1034	17·296		12	0	41 E.	12 6	S.	1	R.	205	2·5	21
1035	17·296		20	0	18 E.	12 6	R.	1	S.	186	2·9	25
1040	17·298		28	1	17 E.	12 6	A.	4	M.	178	2·4	19
1036	17·296		36	0	1 E.	12 6	S.	3	N.	243	3·8	26
1044	17·378		44	1	14 E.	12 6	N.	3	A.	190	2·9	25
1042	17·298	14	52	0	43 E.	12 6	A.	1	R.	158	2·1	25



*List of Plates in Zone —19° (continued).*

No. of plate.	Year and fraction, 1900+.	R.A. of centre.		Hour angle.		Exposures.	Observer.	Instrument.	Measurer.	No. of stars.	Ratio to Schönfeld.	No. in A.G.C. (Algiers.)
		h	m	h	m	m						
1045	17-378	15	0	1	0 E.	12 6	S.	3	N.	200	2.5	26
1037	17-296		8	0	0	12 6	R.	1	S.	146	1.8	30
1043	17-298		16	0	39 E.	12 6	A.	4	M.	216	2.7	20
1046	17-378		24	0	53 E.	12 6	N.	1	R.	218	2.1	25
1047	17-378		32	0	29 E.	12 6	S.	3	A.	251	2.4	34
1052	17-381		40	0	54 E.	12 6	H.	3	N.	259	2.7	29
1038	17-296		48	0	10 E.	12 6	S.	1	S.	249	3.5	19
1053	17-381	15	56	0	42 E.	12 6	R.	1	R.	195	3.0	26
1054	17-381	16	4	0	20 E.	12 6	H.	4	M.	142	2.8	23
1055	17-381		12	0	0	12 6	R.	3	A.	129	2.6	20
1215	18-194		20	0	45 E.	20 12	A.	3	N.	120	3.6	10
1208	18-189		28	1	7 E.	20 12	M.	1	R.	115	2.1	15
1025	17-230		36	0	43 E.	12 6	S.	4	M.	159	2.3	19
1049	17-378		44	0	41 E.	12 6	S.	4	M.	198	2.5	27
1056	17-381	16	52	0	8 E.	12 6	H.	1	R.	211	2.1	28
1050	17-378	17	0	0	27 E.	12 6	N.	3	A.	341	2.8	34
1059	17-383		8	0	54 E.	12 6	N.	3	N.	327	2.7	34
1057	17-381		16	0	4 E.	12 6	R.	1	S.	305	3.4	32
1060	17-383		24	0	18 E.	12 6	S.	4	M.	230	2.3	23
1051	17-378		32	0	29 E.	12 6	S.	1	R.	365	4.4	31
1209	18-189		40	1	28 E.	20 12	M.	1	S.	327	4.0	22
1066	17-402		48	1	10 E.	12 8	A.	3	A.	432	2.5	39
1061	17-383	17	56	0	20 E.	12 6	N.	4	M.	489	3.4	48
1067	17-402	18	4	0	53 E.	12 6	A.	3	N.	1136	6.5	49
1068	17-402		12	0	30 E.	12 6	G.	3	A.	1355	10.2	57
1236	18-520		20	0	50 E.	20 12	M.	1	S.	379	3.1	40
1241	18-523		28	0	13 E.	20 12	G.	1	R.	370	3.3	38
1261	18-652		36	0	25 E.	24 18	B.	4	M.	429	3.0	31
1245	18-526		44	0	28 E.	20 12	M.	3	A.	248	2.0	45
1242	18-523	18	52	0	3 E.	20 12	G.	4	M.	344	2.8	43
1271	18-810	19	0	1	56 W.	20 20	B.	1	R.	380	2.8	36
1270	18-808		8	1	48 W.	20 16	B.	3	N.	377	2.5	40
1285	18-890		16	3	17 W.	20 17	B.	1	R.	578	4.0	54
1262	18-652		24	0	16 E.	24 16	A.	3	A.	353	3.0	37
1276	18-821		32	1	41 W.	20 20	B.	1	R.	506	4.7	34
1274	18-816		40	1	30 W.	21 18	B.	3	A.	290	2.6	29
1278	18-824		48	1	28 W.	24 20	M.	3	A.	354	3.4	34
1292	18-925	19	56	3	28 W.	20 20	B.	1	R.	231	2.5	28
1283	18-852	20	4	1	42 W.	24 20	A.	3	A.	437	4.8	30
1263	18-652		12	0	14 E.	24 20	B.	1	R.	246	2.7	30
1291	18-923		20	3	28 W.	20 16	B.	3	A.	234	2.8	35
1295	18-934		28	3	4 W.	24 20	N.	3	N.	350	3.5	24
1233	18-460		36	0	23 W.	20 12	B.	3	A.	253	3.0	36
1133	17-852		44	1	11 W.	20 10	B.	3	A.	307	3.9	26
1297	18-945	20	52	2	55 W.	20 16	B.	1	S.	365	4.0	29
1234	18-460	21	0	0	44 W.	20 12	M.	4	M.	177	2.1	25
1296	18-942		8	2	40 W.	20 16	B.	3	A.	261	3.9	21
1277	18-821		16	1	2 W.	20 20	B.	3	N.	275	4.1	22
1279	18-824		24	0	54 W.	24 20	A.	3	A.	285	3.9	22
1284	18-852	21	32	1	18 W.	24 20	A.	1	R.	302	5.7	26



*List of Plates in Zone -19° (continued).*

No. of plate.	Year and fraction, 1900+.	R.A. of centre.		Hour angle.		Exposures.		Observer.	Instrument.	Measurer.	No. of stars.	Ratio to Schonfeld.	No. in A.G.C. (Algiers).
		h	m	h	m	m	m						
1280	18.827	21	40	0	34 W.	24	16	A.	3	N.	282	5.0	24
1134	17.852		48	0	56 W.	20	16	N.	3	A.	238	4.3	23
1286	18.890	21	56	1	36 W.	20	16	R.	3	N.	173	3.1	21
1141	17.876	22	4	0	44 W.	20	10	M.	4	M.	218	3.9	23
1148	17.917		12	1	5 W.	20	12	P.	3	N.	137	2.7	12
1151	17.920		20	1	4 W.	20	10	H.	3	A.	190	3.0	19
1155	17.923		28	1	15 W.	20	10	S.	1	S.	151	3.0	24
1146	17.914		36	0	49 W.	18	10	S.	4	M.	146	2.3	21
1138	17.854		44	0	31 W.	20	10	M.	1	R.	157	2.5	21
1135	17.852	22	52	0	48 W.	20	10	N.	3	N.	194	3.1	16
1129	17.849	23	0	0	32 W.	20	10	G.	1	R.	143	2.7	23
1147	17.914		8	1	38 W.	20	10	S.	1	S.	138	2.8	22
1109	17.786		16	0	9 E.	18	10	G.	4	M.	157	3.0	22
1143	17.876		24	0	55 W.	20	10	M.	4	M.	163	3.1	15
1281	18.827		32	0	13 E.	20	16	A.	1	R.	148	3.0	16
1124	17.846		40	0	11 W.	20	10	M.	3	A.	182	2.9	15
1282	18.827		48	0	24 W.	24	16	A.	3	A.	182	3.1	21
1110	17.786	23	56	0	19 E.	18	10	S.	4	M.	172	3.8	15

The total number of star images measured is 58,743.

## IV.—MEASUREMENT OF THE PHOTOGRAPHS.

See Introduction to Vol. I. p. xiii.

## V.—DETERMINATION OF PHOTOGRAPHIC MAGNITUDES.

At the same time the rectangular co-ordinates are measured, an estimate is made of the diameter of the star image. The sum of the estimates made in the two positions of the plate is given in the second column under the heading of Catalogue. The unit is thus  $\frac{1}{2000}$  of a réseau interval, or  $0''.15$ , as at Greenwich.

The general formula adopted provisionally is

$$m = a - b\sqrt{d},$$

where  $d$  is the diameter (sum of the two estimates) and  $a$  and  $b$  are certain constants.

The value of  $b$  for plates in the present volume is taken throughout as 1.09. The magnitudes of the reference stars are given in the Algiers Catalogue on a scale similar to that of the B.D. By counting the number of stars under the different headings, these magnitudes were converted so as to conform to a scale comparable with that of Chapman and Melotte. These revised magnitudes were then substituted in the above formula and the value of  $a$  determined for each star on the plate. The mean value of  $a$  thus determined for each plate adopted.



A table for converting measured diameter into magnitudes is given on pp. xlvi and xlvii.

## VI.—MEASURES OF POSITION.

### PERSONALITY OF MEASURER.

The personality of the measurer is determined for each plate as the work proceeds, in the same manner as at Oxford. A full discussion will be found in the *Monthly Notices of the R.A.S.*, vol. lvii. p. 621.

The mean excess of the R measure (Reversed) over the D measure is tabulated below in units of  $0''.03$ .

The error of bisection is one half of the quantity R—D given in the table.

Measurer.	Limiting plate Nos.	Period.	Mean R—D.		No. of plates.
			x.	y.	
M. . . .	Whole zone	1917 January—1918 September	+ 3	+2	36
N. . . .	Whole zone	1917 January—1918 December	— 5	+6	26
A. . . .	901—984	1917 January—1917 June	— 1	—2	19
	988—1068	1917 June—1917 September.	— 3	+2	13
	1133—1282	1918 January—1918 December	— 5	—1	14
R. . . .	888—892	1917 January	— 2	—8	4
	904—1051	1917 January—1917 August	0	+1	23
	1138—1281	1918 January—1919 January	— 2	+5	11
S. . . .	882—914	1917 January—1917 March	— 8	+3	11
	947—1035	1917 April—1917 July	0	0	8
	1037—1236	1917 August—1918 July	0	+4	7
	1297	1918 December	+ 1	—7	1
M.A. . .	854—961	1917 January—1917 May	+11	+6	3
	967—1012	1917 May—1917 July	+14	—5	4

### PROBABLE ERROR OF MEASURES.

See Introduction to Vol. I. pp. xvi—xvii, and Introduction to Vol. II. p. xv.

### ERRORS OF RÉSEAUX.

As stated above, three different réseaux were used for plates adopted for this zone.

The Oxford Gautier réseau, which was used for the great majority of plates, has the line  $y=3$  displaced. The displacement is parallel to the true direction and amounts to  $—0.158$  of a réseau interval. In the case of stars lying between the lines  $y=2$  and  $y=4$ , the focal length of the measuring microscope is altered after the



$x$  co-ordinates have been measured in order to measure the  $y$  co-ordinates. The means of the two measures so made in different positions of the plate are then corrected; for stars for which  $3 > y > 2$ , the correction is  $-.0158 (y-2)$ , and for stars for which  $4 > y > 3$  the correction is  $-.0158 (4-y)$ ; the correction is easily applied by means of a small table; thus when  $y$  lies between 2.601 and 2.665, subtract 0.010, and when  $y$  lies between 3.601 and 3.665, subtract 0.006. The corrected measures are given in the catalogue. The remaining errors of this réseau have been treated as small accidental errors; the errors of the other two réseaux employed in this zone have also been treated similarly. The error of inclination of the lines in the National Physical Laboratory réseau is, as mentioned above, absorbed in the plate constants.

#### VII.—PLATE CONSTANTS.

The plate constants were determined by the method and formulæ given by Professor Turner in *Mon. Not. R.A.S.*, vol. liv. p. 11. The rigorous formulæ there given were modified in practice as approximate formulæ, more convenient for the formation of tables. See the next section, pp. xix to xxiii.

The reference stars for plates in the present volume were taken from the Algiers Astronomische Gesellschaft Catalogue. This catalogue is yet unpublished, but a typewritten copy was kindly lent to us by the Director of the Paris Observatory. The positions of stars in this catalogue are given for 1900.0, the epoch of the Astrographic Catalogue. After the plate constants have been determined, they are used to correct the Hyderabad places for comparison with Algiers, the residuals (Hyderabad-Algiers) so obtained being entered in ledgers. Except in the case of known proper motion stars, the residuals are generally small, scarcely any exceeding three seconds of arc; a number of errors have been detected, most of which probably exist only in the typewritten copy and are absent from the original manuscript.

The method of computing the provisional constants is fully explained in the Introduction to the Oxford Astrographic Catalogue, vol. i. p. xxxvii.; but for convenience of reference it is described briefly below.

The R.A.'s and Declinations of stars in the Algiers A.G. Catalogue were first converted into standard co-ordinates by methods explained in the next section. A catalogue of these standard co-ordinates is given on pp. 179 to end of this volume. An approximate solution was then formed for each plate, generally by consideration of four stars only. The scale value was always taken as  $-.01750$  or  $-.02500$  [the former when the Gautier réseau belonging to the Kodaikanal Observatory was used, and the latter when either the Oxford Gautier réseau No. 5 or the National Physical Laboratory réseau was used]; the other constants were chosen to be numbers convenient for computation.



Now, if  $\xi, \eta$  represent standard co-ordinates referred to the plate centre as origin, and  $\alpha, \delta$ , R.A. and Declination,  $A, D$ , the R.A. and Declination of the plate centre, we have

$$\begin{aligned}\xi &= k \tan (\alpha - A) \sec (\theta - D) \cos \theta, \\ \eta &= k \tan (\theta - D), \\ \tan \theta &= \sec (\alpha - A) \tan \delta, \\ k &= 687.549 \text{ (reciprocal of circular measure of } 5').\end{aligned}$$

Then if  $\xi' = \xi + 13$ ,  $\eta' = \eta + 13$ ;  $\xi', \eta'$  represent standard co-ordinates referred to the corner of the réseau, and if  $\Delta\xi', \Delta\eta'$  represent the correction calculated by means of the above approximate solution,

$$x' = \xi' + \Delta\xi', \quad y' = \eta' + \Delta\eta'.$$

If  $x, y$  represent the actual measures, we can form the differences  $x - x', y - y'$  for each star on the plate. The stars are then divided into four groups (two by the line  $x = 13.0$  and two by the line  $y = 13.0$ ), and the mean values of  $x, x - x', y, y - y'$  are found for each of these groups. We thus get four pairs of equations of the type

$$ax + by + c = x - x', \quad dx + ey + f = y - y',$$

from which the six constants  $a, b, c, d, e, f$  can be computed.

Now, to combine this second solution with the first approximate solution into a single formula, we have the following pairs of equations:

$$\begin{aligned}x' &= \xi' + A'\xi' + B'\eta' + C, & y' &= \eta' + D'\xi' + E'\eta' + F, \\ x &= x' + ax + by + c, & y &= y' + dx + ey + f, \\ \xi' &= x - Ax - By - c, & \eta' &= y - Dx - Ey - F,\end{aligned}$$

where  $A' B' \dots$  are the constants of the "Approximate Solution" and  $A' B' \dots$  those of the final solution.

It is readily seen that the two sets of constants are connected by the relations

$$\begin{aligned}A &= A' + a - A'(A' + a) - B'(D' + d), \\ B &= B' + b - A'(B' + b) - B'(E' + e), \\ C &= C' + c - A'(C' + c) - B'(F' + f), \\ D &= D' + d - E'(D' + d) - D'(A' + a), \\ E &= E' + e - E'(E' + e) - D'(B' + b), \\ F &= F' + f - E'(F' + f) - D'(C' + c).\end{aligned}$$

The corrections to the sums  $A' + a, B' + b$ , etc., are small, and are easily applied.



Finally, we have the equations

$$\xi = x - 13 - Ax - By - C, \quad \eta = y - 13 - Dx - Ey - F,$$

connecting the standard co-ordinates with the measures by means of the provisional constants.

Theoretically, when provisional constants are corrected for refraction (see below) we should have  $A=E$  and  $B+D=0$ , or in the case of plates between 1140 and 1168, a small positive quantity; where these relations are not satisfied, it generally happens that the reference stars are not uniformly distributed over the plate, though it is not possible to account in this way for all the abnormal results.

Accurate formulæ for the effects of differential refraction are given in the *Monthly Notices of the R.A.S.*, vol. lvii. p. 135.

If  $\beta_0$  is the coefficient of refraction,  $X, Y$  the co-ordinates of the zenith supposed projected on the plate, and  $X, Y, x, y$  are measured in terms of the focal length of the telescope as unit, the corrections to be applied to  $x, y$  are, neglecting terms beyond the first order,

$$\Delta x = \beta_0(1+X^2) \cdot x + \beta_0 \cdot X \cdot Y \cdot y; \quad \Delta y = \beta_0 XYx + \beta_0(1+Y^2) \cdot y.$$

These corrections are tabulated below.

Zone  $-19^\circ$ .—Correction for Refraction in Units of  $\cdot 000001$ .

Hour angle.		$\beta_0(1+X^2)$	$\beta_0 XY$	$\beta_0(1+Y^2)$	Hour angle.		$\beta_0(1+X^2)$	$\beta_0 XY$	$\beta_0(1+Y^2)$
h	m				h	m			
0	0	283	0	437	1	44	380	131	459
	8	284	8	438	1	52	399	145	464
	16	285	17	438	2	0	421	160	468
	24	288	26	438		8	445	175	473
	32	291	35	439		16	473	193	479
	40	295	44	440		24	506	212	486
	48	301	53	441		32	543	233	493
0	56	308	63	443		40	585	257	501
1	4	316	73	445		48	634	283	506
	12	325	83	447	2	56	692	313	522
	20	336	95	449	3	4	759	346	535
	28	349	106	452		12	839	385	550
1	36	364	118	455	3	20	933	429	567

Thus the corrections at hour angle  $2^h 0^m$  are

$$\begin{aligned} \Delta x &= +\cdot 000421x - \cdot 000160y, \\ \Delta y &= -\cdot 000160x + \cdot 000468y, \end{aligned}$$

the upper sign to be taken when the plates are taken west of the meridian.



The corrections for differential aberration are—

$$\begin{aligned}\Delta x &= +K \cos CW \cdot x, \\ \Delta y &= +K \cos CW \cdot y,\end{aligned}$$

where C is the plate centre and W is the point on the Ecliptic to which the Earth tends. We have

$$K \cos CW = 0.000100 \{-0.40 \sin D \cos \odot - 0.96 \cos D \sin (A - \odot)\},$$

where  $\odot$  is the sun's longitude, neglecting a term  $0.000004 \cos D \sin (A + \odot)$ .

For the plates in the present volume  $D = -19^\circ$ , and therefore

$$K \cos CW = +0.00013 \cos \odot - 0.00091 \sin (A - \odot).$$

It will make very little difference if we substitute the sun's R.A. for longitude, and then for a plate taken on the meridian at midnight  $A - \odot = 180^\circ$ , and the second term vanishes. For plates taken on the meridian at other times, the second term has the following values (unit  $0.000001$ ):—

6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .
-91	-88	-79	-65	-46	-24	0	+24	+46	+65	+79	+88	+91

The first term has the following values at the middle of each month in units of  $0.000001$ :—

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
+5	+11	+13	+12	+7	+1	-5	-10	-13	-12	-8	-1

Thus the  $x$  and  $y$  measures made on a plate taken at 16 hours in September require the corrections  $+0.00066x$ , and  $+0.00066y$  respectively for aberration.

#### VIII.—DETERMINATION OF A STAR'S STANDARD CO-ORDINATES FROM ITS RIGHT ASCENSION AND DECLINATION: AND OF ITS R.A. AND DECLINATION FROM ITS MEASURED CO-ORDINATES.

From the provisional constants given at the head of each plate, the standard co-ordinates of a star are obtained from the measures by the formulæ

$$\begin{aligned}\xi &= x - 13 - Ax - By - C, \\ \eta &= y - 13 - Dx - Ey - F.\end{aligned}$$

The name "standard co-ordinates," introduced by Professor Turner (*Monthly*



*Notices of the R.A.S.*, vol. liv. p. 11), is now generally adopted to denote the co-ordinates of a star on an ideal plate fulfilling the following conditions :—

- (i.) The plate truly centred and oriented for 1900.0.
- (ii.) No refraction and aberration.
- (iii.) A suitable unit of length adopted.

The co-ordinates  $\xi$ ,  $\eta$ , of a star are derived from its R.A. and Decl., by the purely geometrical formulæ

$$\begin{aligned}\xi &= k \tan (\alpha - A) \sec (\theta - D) \cos \theta, \\ \eta &= k \tan (\theta - D), \\ \tan \theta &= \sec (\alpha - A) \tan \delta \text{ and } k = 687.549,\end{aligned}$$

where A, D are the R.A. and Decl. of the plate centre,  $\alpha$ ,  $\delta$  those of the star.

In zones not too near the pole, it is more convenient to use the following approximate formulæ :—

Let

$$\begin{aligned}X &= \alpha - A \text{ expressed in units of } 20'' \text{ sec.}, \\ Y &= \delta - D \text{ expressed in units of } 300''.\end{aligned}$$

Then, with sufficient accuracy in the Hyderabad zones, we have

$$\eta = Y + \left(\frac{1}{4} \mu \sin 2D\right) \cdot X^2 + \frac{1}{6} \mu^2 (2Y^3 + 3X^2 \cdot Y \cos 2D),$$

where

$$\mu = 1/k = .00145444 \text{ (=circular measure of } 5').$$

The value of the term  $\frac{1}{4} \mu \sin 2D \cdot X^2$  is given in Table I. for  $D = -19^\circ$  and for different values of X (since the formulæ are the same for equal declinations N. and S. of the equator, D is to have its numerical value, the minus sign being ignored in these formulæ).

The small quantity  $\frac{1}{6} \mu^2 (2Y^3 + 3X^2 \cdot Y \cdot \cos 2D)$  is given in Table II. (Arguments X and Y).

So that we have

$$\begin{aligned}\eta &= Y + \text{Table I.} + \text{Table II.}, \\ \text{and } Y &= \eta - \text{Table I.} - \text{Table II.}\end{aligned}$$

Therefore, when X is known, we can obtain  $\eta$  from Y or Y from  $\eta$ .

To get  $\xi$  from X, tables have been arranged in the present volume for two alternative methods, one set using the existing logarithmic tables and the other without using them.

(i.) With logarithms—we have

$$\begin{aligned}\xi &= \tan (\alpha - A) \cdot \{ \sin D \cdot (k \cot D - \eta) \} \quad . \quad . \quad . \quad (1) \\ \text{or } \xi &= X \left( 1 + \frac{1}{4} \mu^2 \cdot X^2 \right) \{ \mu \cos D \cdot \tan D_0 (k \cot D_0 - \eta) \} \quad . \quad . \quad . \quad (2)\end{aligned}$$

Consider (i.). We have for  $D = 19^\circ$

$$\log \{ \sin D (k \cot D - \eta) \} = \log \sin 19^\circ + \log (2513.091 - \eta).$$



Now if for  $\log (2513.091 - \eta)$  we write  $\log (2513.100 - \eta)$ , we can read the values of this term for  $\eta = 0.0, 0.1, 0.2 \dots$  directly from the tables without interpolation. Representing the corresponding value of  $D$  by  $D_0$ , which is very nearly the same as  $D$ , we have

$$\sin D (k \cot D - \eta) = \sin D \cdot \frac{k \cot D - \eta}{k \cot D_0 - \eta} (k \cot D_0 - \eta),$$

in the fractional term of which we may give  $\eta$  its mean value, zero, to a very close approximation, thus we get the form (2).

Table V. gives the values of  $\log (1 + \frac{1}{3}\mu^2 \cdot X^2)$ , and is the same for all zones,

Table III. gives the values of  $[\text{const.} + \log \{\mu \cos D \cdot \tan D_0 (k \cot D_0 - \eta)\}]$  for multiples of 0.1000, and

Table IV. gives the corrections for the fractional part of  $\eta$  beyond the first decimal place.

Thus  $\xi$  is found from the formulæ

$$\begin{aligned} \log \xi &= \log X + \text{Table III. (Arg. } \eta \text{ to } 0.1) \\ &\quad + \text{Table IV. (Arg. fractional part of } \eta \text{ beyond the 1st decimal place)} \\ &\quad + \text{Table V. (Arg. } X) \end{aligned}$$

(ii.) Without logarithms.—When  $X$  is constant we have  $\xi = M - N \cdot \eta$ , so that the differences in  $\eta$  are constant. When  $\eta$  is constant we have  $\xi = MX (1 + \frac{1}{3}\mu^2 \cdot X^2)$ , so that the differences are not quite uniform; but if we have a sufficiently extended table for  $X$  we can safely interpolate, as Tables IX. and X. will show.

It is to be noted that in these tables, the above formula has been transformed from  $(X, \eta)$  to  $(X, Y)$ .

As an example of both methods of calculation take the star A.G.C. Algiers 9996, whose standard co-ordinates are given on p. 181.

	R.A.	Declination.	
Algiers 9996 . . . . .	23 <sup>h</sup> 59 <sup>m</sup> 46 <sup>s</sup> .03	−19° 58' 8".7 (1900.0)	
Plate centre . . . . .	0 <sup>h</sup> 4 <sup>m</sup> 0 <sup>s</sup>	−19° 0' 0" (1900.0)	
∴ X=−12.6985		Y=+11.6290	
Y	=+11.6290	log X	=11.103752
Table I.	=+ 361	Table III.	= 9.973118
Table II.	=+ 26	Table IV.	= 7
		Table V.	= 49
<hr/>		<hr/>	
η=sum	=+11.6677	log ξ=sum	= 11.076926
η'=η+13	= 24.6677	ξ=	−11.9378
		ξ'=13+ξ	=+ 1.0622



Without logarithms, the computation for  $\xi$  would stand thus; since  $Y$  is positive, we refer to Table X., which is headed  $\xi = X - \frac{1}{20} X - \frac{1}{240} X$ —following table, hence we have

$$\begin{aligned} X &= -12.6985 \\ -\frac{1}{20} X &= +.6349 \\ -\frac{1}{240} X &= +.0529 \\ -\text{Table} &= +.0728 \end{aligned}$$

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$$\xi = -11.9379$$

$$\therefore \xi' = 13 + \xi = +1.0621$$

To obtain R.A. and Declination from the measures. First form the standard co-ordinates by means of the formulæ

$$\begin{aligned} \xi &= X - 13 - Ax - By - C, \\ \eta &= Y - 13 - Dx - Ey - F. \end{aligned}$$

Then by the first method we have

$$\begin{aligned} \log X &= \log \xi \\ &+ \text{Table VI. (Arg. } \xi). \\ &+ \text{Table VII. (Arg. } \eta \text{ to } 0.1). \\ &+ \text{Table VIII. (Arg. remainder of } \eta). \end{aligned}$$

With the value of  $X$  so obtained we can form  $\eta$ —Table I., and so find a sufficiently approximate value of  $Y$  to enter Table II.

As an example take the same star as before, viz. Hyderabad  $-19^\circ.184$ , whose measures are given on page 3 of the present volume.

$$\begin{aligned} x &= 1.386 \\ -Ax &= +.35 \\ -By &= -.155 \\ -C &= -.207 \\ \hline \xi' &= 1.059 \\ \xi &= -11.941 \end{aligned}$$

$$\begin{aligned} y &= 23.864 \\ -Dx &= +.9 \\ -Ey &= +.610 \\ -F &= +.181 \\ \hline \eta' &= 24.664 \\ \eta &= 11.664 \end{aligned}$$

$$\begin{aligned} \log \xi &= 1.077041 \\ \text{Table VI.} &= +.9 \\ \text{Table VII.} &= +.026781 \\ \text{Table VIII.} &= +.36 \\ \hline \text{sum} &= 1.103867 \\ X &= -12.7019 \\ &= -4^m 14^s.04 \end{aligned}$$

$$\begin{aligned} \text{Table I.} &= -.0361 \\ \text{Table II.} &= -.26 \end{aligned}$$

$$\begin{aligned} Y &= +11.625 \\ &= +58' 7''.6. \end{aligned}$$



The co-ordinates of the plate centre being  $0^h 4^m, -19^\circ$ , the R.A. and Declination of the star for 1900.0 are—

$$23^h 59^m 45^s.96 \qquad -19^\circ 58' 7''.6.$$

The small differences between these values and those given above are the differences between the Hyderabad photographic place and the Algiers meridian place, and are the sum of—

- (1) Accidental or systematic errors in the meridian place.
- (2) Accidental or systematic errors in the photographic place, including the effect of (1) on the provisional constants of the plate.
- (3) Proper motion between the epochs of the two observations.

It is to be noted that the computation of  $\xi', \eta'$  from  $x, y$  above is made to only three places of decimals. With the large scale value which has been inevitable with the Hyderabad plates, it would require a little care to calculate to the fourth place accurately; since the measures are made only to three places, the extra labour is scarcely justified, and will seldom make a difference of as much as one unit in the third decimal place.

Without the use of logarithms the computation for X stands as follows:—

Since  $\eta$  is positive, we refer to Table XII., the precept at the head of which is  $X = \xi + \frac{1}{20} \cdot \xi + \frac{1}{140} \cdot \xi + \text{following table.}$

$$\begin{array}{rcl} \xi & = & -11.9410 \\ + \frac{1}{20} \xi & = & - .5970 \\ + \frac{1}{140} \xi & = & - .0853 \\ + \text{Table XII.} & = & - .0785 \\ \hline X & = & -12.7018 \end{array}$$

Differences of one or two units in the fourth place, when different methods of computation are used, are unavoidable, and may be neglected.

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# HYDERABAD ASTROGRAPHIC CATALOGUE

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## T A B L E S

FOR THE CONVERSION OF

R.A. AND DEC. INTO STANDARD CO-ORDINATES

AND OF

STANDARD CO-ORDINATES INTO R.A. AND DEC.

FOR PLATES WITH CENTRES IN

DEC.  $-19^{\circ}$

---

BOTH WITH AND WITHOUT LOGARITHMS







TABLE I.—For  $D = -19^\circ$ .

$$\Delta_1 Y = \frac{\mu}{4} \sin 2D. X^2 = .0002239 \cdot X^2.$$

Always additive to Y to get  $\eta$ . Always subtractive from  $\eta$  to get Y.

$\Delta_2 Y$  is given in Table II.

X.	$\Delta_1 Y.$	X.	$\Delta_1 Y.$	X.	$\Delta_1 Y.$	X.	$\Delta_1 Y.$
0.0-0.4	.0000	4.0	.0036	7.7	.0133	11.4	.0291
0.5	.0001	4.1	.0038	7.8	.0136	11.5	.0296
0.6	.0001	4.2	.0040	7.9	.0140	11.6	.0301
0.7	.0001	4.3	.0041	8.0	.0143	11.7	.0307
0.8	.0001	4.4	.0043	8.1	.0147	11.8	.0312
0.9	.0002	4.5	.0045	8.2	.0151	11.9	.0317
1.0	.0002	4.6	.0047	8.3	.0154	12.0	.0322
1.1	.0003	4.7	.0050	8.4	.0158	12.1	.0328
1.2	.0003	4.8	.0052	8.5	.0162	12.2	.0333
1.3	.0004	4.9	.0054	8.6	.0166	12.3	.0339
1.4	.0004	5.0	.0056	8.7	.0169	12.4	.0344
1.5	.0005	5.1	.0058	8.8	.0173	12.5	.0350
1.6	.0006	5.2	.0061	8.9	.0177	12.6	.0356
1.7	.0007	5.3	.0063	9.0	.0181	12.7	.0361
1.8	.0007	5.4	.0065	9.1	.0185	12.8	.0367
1.9	.0008	5.5	.0068	9.2	.0190	12.9	.0373
2.0	.0009	5.6	.0070	9.3	.0194	13.0	.0378
2.1	.0010	5.7	.0073	9.4	.0198	13.1	.0384
2.2	.0011	5.8	.0075	9.5	.0202	13.2	.0390
2.3	.0012	5.9	.0078	9.6	.0206	13.3	.0396
2.4	.0013	6.0	.0081	9.7	.0211	13.4	.0402
2.5	.0014	6.1	.0083	9.8	.0215	13.5	.0408
2.6	.0015	6.2	.0086	9.9	.0219	13.6	.0414
2.7	.0016	6.3	.0089	10.0	.0224	13.7	.0420
2.8	.0018	6.4	.0092	10.1	.0228	13.8	.0426
2.9	.0019	6.5	.0095	10.2	.0233	13.9	.0433
3.0	.0020	6.6	.0098	10.3	.0237	14.0	.0439
3.1	.0022	6.7	.0101	10.4	.0242	14.1	.0445
3.2	.0023	6.8	.0104	10.5	.0247	14.2	.0451
3.3	.0024	6.9	.0107	10.6	.0252	14.3	.0458
3.4	.0026	7.0	.0110	10.7	.0256	14.4	.0464
3.5	.0027	7.1	.0113	10.8	.0261	14.5	.0471
3.6	.0029	7.2	.0116	10.9	.0266	14.6	.0477
3.7	.0031	7.3	.0119	11.0	.0271	14.7	.0484
3.8	.0032	7.4	.0123	11.1	.0276	14.8	.0491
3.9	.0034	7.5	.0126	11.2	.0281	14.9	.0497
		7.6	.0129	11.3	.0286	15.0	.0504



TABLE II.—For  $D = -19^\circ$ .

$$\Delta_2 Y = \frac{1}{6} \mu^2 (2Y^3 + 3X^2 Y \cos 2D) = .000000705 \cdot Y^3 + .000000834 \cdot X^2 \cdot Y.$$

Additive to Y with same sign as Y to get  $\eta$ . Additive to  $\eta$  with opposite sign to  $\eta$  to get Y.

Y. X. or $\eta$ .	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	10.5.	11.	11.5.	12.	12.5.	13.	13.5.	14.	14.5.	X. Y. or $\eta$ .
R.I.	Unit=.0001 of a Reseau Interval.																				R.I.
0.5	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0.5
1.0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	1.0
1.5	0	0	0	0	0	0	0	1	1	1	1	1	2	2	2	2	2	2	2	3	1.5
2.0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	2	3	3	3	3	4	2.0
2.5	0	0	0	0	0	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	2.5
3.0	0	0	0	0	1	1	1	1	2	2	3	3	3	3	4	4	4	5	5	5	3.0
3.5	0	0	0	1	1	1	1	2	2	3	3	3	4	4	4	5	5	6	6	6	3.5
4.0	0	0	1	1	1	1	2	2	3	3	4	4	4	5	5	6	6	6	7	7	4.0
4.5	1	1	1	1	1	2	2	2	3	4	4	5	5	6	6	6	7	7	8	8	4.5
5.0	1	1	1	1	2	2	2	3	4	4	5	5	6	6	7	7	8	8	9	10	5.0
5.5	1	1	1	2	2	2	3	3	4	5	6	6	7	7	8	8	9	9	10	11	5.5
6.0	2	2	2	2	2	3	3	4	5	6	6	7	8	8	9	9	10	11	11	12	6.0
6.5	2	2	2	2	3	3	4	5	5	6	7	8	8	9	10	10	11	12	12	13	6.5
7.0	2	2	3	3	3	4	5	5	6	7	8	9	9	10	11	11	12	13	14	15	7.0
7.5	3	3	3	4	4	5	5	6	7	8	9	10	10	11	12	13	13	14	15	16	7.5
8.0	4	4	4	4	5	5	6	7	8	9	10	11	12	12	13	14	15	16	17	18	8.0
8.5	4	4	5	5	5	6	7	8	9	10	11	12	13	14	14	15	16	17	18	19	8.5
9.0	5	5	5	6	6	7	8	9	10	11	13	13	14	15	16	17	18	19	20	21	9.0
9.5	6	6	6	7	7	8	9	10	11	12	14	15	16	16	17	18	19	20	21	23	9.5
10.0	7	7	7	8	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23	24	10.0
10.5	8	8	9	9	10	10	11	12	14	15	17	18	19	20	21	22	23	24	25	26	10.5
11.0	9	9	10	10	11	12	13	14	15	17	18	19	20	21	22	24	25	26	27	29	11.0
11.5	11	11	11	12	12	13	14	15	17	18	20	21	22	23	24	26	27	28	29	31	11.5
12.0	12	12	13	13	14	15	16	17	19	20	22	23	24	25	26	28	29	30	32	33	12.0
12.5	14	14	14	15	15	16	17	19	20	22	24	25	26	27	29	30	31	33	34	36	12.5
13.0	15	16	16	16	17	18	19	21	22	24	26	27	28	30	31	32	34	35	37	38	13.0







*All Zones.*For  $D = -19^\circ$ .

TABLE V.

$$\frac{1}{3} \mu^2 \log_{10} e \times X^2 = .000000306 X^2.$$

Add to log. X (with Tables III., IV.)  
to get log.  $\xi$ .

X.	.0.	.1.	.2.	.3.	.4.	.5.	.6.	.7.	.8.	.9.
1	0	0	0	1	1	1	1	1	1	1
2	1	1	1	2	2	2	2	2	2	3
3	3	3	3	3	4	4	4	4	4	5
4	5	5	5	6	6	6	6	7	7	7
5	8	8	8	9	9	9	10	10	10	11
6	11	11	12	12	13	13	13	14	14	15
7	15	15	16	16	17	17	18	18	19	19
8	20	20	21	21	22	22	23	23	24	24
9	25	25	26	26	27	28	28	29	29	30
10	31	31	32	32	33	34	34	35	36	36
11	37	38	38	39	40	40	41	42	43	43
12	44	45	46	46	47	48	49	49	50	51
13	52	53	53	54	55	56	57	57	58	59
14	60	61	62	63	63	64	65	66	67	68
15	69	70	71	72	73	73	74	75	76	77

Unit = .000001.

TABLE VI.

$$\text{Const.} - \frac{1}{3} \mu^2 \log_{10} e \cdot \sec^2 D \cdot \xi^2 \\ = .000058 - .000000343 \xi^2.$$

Add to log.  $\xi$  to get log. X.

$\xi$ .	.0.	.1.	.2.	.3.	.4.	.5.	.6.	.7.	.8.	.9.
0	58	58	58	58	58	58	58	58	58	58
1	58	58	58	57	57	57	57	57	57	57
2	57	56	56	56	56	56	56	55	55	55
3	55	55	54	54	54	54	54	53	53	53
4	53	52	52	52	51	51	51	50	50	50
5	49	49	49	48	48	48	47	47	46	46
6	46	45	45	44	44	44	43	43	42	42
7	41	41	40	40	39	39	38	38	37	37
8	36	35	35	34	34	33	33	32	31	31
9	30	30	29	28	28	27	26	26	25	24
10	24	23	22	22	21	20	20	19	18	17
11	16	16	15	14	13	13	12	11	10	9
12	9	8	7	6	5	4	3	3	2	1

Unit = .000001.







TABLE IX.—For D = - 19°.

Y Negative.

$$\xi = X - \frac{1}{25} X - \frac{1}{125} X - \text{following table.}$$

X. Y.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	X. Y.
-13.0	0003	0006	0010	0013	0016	0018	0021	0023	0025	0027	0029	0030	0030	0030	0030	-13.0
9	0004	0007	0011	0015	0018	0021	0024	0027	0030	0032	0034	0035	0036	0037	0037	-12.9
8	004	008	012	016	020	024	028	031	034	037	039	041	043	044	044	8
7	005	009	014	018	023	027	031	035	038	041	044	047	049	050	051	7
6	005	010	015	020	025	030	034	038	042	046	049	052	055	057	059	6
5	006	011	017	022	027	033	038	042	047	051	055	058	061	064	066	5
4	006	012	018	024	030	035	041	046	051	056	060	064	067	070	073	4
3	007	013	020	026	032	038	044	050	055	060	065	069	073	077	080	3
2	007	014	021	028	034	041	048	054	060	065	070	075	080	084	087	2
1	008	015	022	030	037	044	051	057	064	070	075	081	086	090	094	1
-12.0	008	016	024	032	039	047	054	061	068	074	081	086	092	097	101	-12.0
-11.9	0008	0017	0025	0034	0042	0050	0058	0065	0072	0079	0086	0092	0098	0103	0108	-11.9
8	009	018	027	035	044	053	061	069	077	084	091	098	104	110	115	8
7	009	019	028	037	046	055	064	073	081	089	096	103	110	117	122	7
6	010	020	029	039	049	058	068	077	085	093	101	109	116	123	130	6
5	010	021	031	041	051	061	071	080	089	098	107	115	122	130	137	5
4	011	022	032	043	053	064	074	084	094	103	112	120	129	137	144	4
3	011	022	034	045	056	067	078	088	098	108	117	126	135	143	151	3
2	012	023	035	047	058	070	081	092	102	112	122	132	141	150	158	2
1	012	024	037	049	060	072	084	095	106	117	127	137	147	156	165	1
-11.0	013	025	038	051	063	075	088	099	111	122	133	143	153	163	172	-11.0
-10.9	0013	0026	0039	0052	0065	0078	0091	0103	0115	0127	0138	0149	0159	0170	0179	-10.9
8	014	027	041	054	068	081	094	107	119	131	143	155	166	176	186	8
7	014	028	042	056	070	084	097	110	123	136	148	160	172	183	194	7
6	015	029	044	058	072	087	101	114	128	141	154	166	178	190	201	6
5	015	030	045	060	075	090	104	118	132	146	159	172	184	196	208	5
4	016	031	047	062	077	092	107	122	136	150	164	177	190	203	215	4
3	016	032	048	064	079	095	111	126	140	155	169	183	196	209	222	3
2	017	033	049	066	082	098	114	129	145	160	174	189	203	216	229	2
1	017	034	051	068	084	101	117	133	149	165	180	194	209	223	236	1
-10.0	018	035	052	070	087	104	120	137	153	169	185	200	215	229	243	-10.0
-9.9	0018	0036	0054	0071	0089	0106	0124	0141	0158	0174	0190	0206	0221	0236	0250	-9.9
8	018	037	055	073	091	109	127	145	162	179	195	211	227	243	257	8
7	019	038	057	075	094	112	130	148	166	183	200	217	233	249	264	7
6	019	039	058	077	096	115	134	152	170	188	206	223	240	256	272	6
5	020	040	059	079	098	118	137	156	175	193	211	228	246	262	279	5
4	020	040	061	081	101	121	140	160	179	198	216	234	252	269	286	4
3	021	041	062	083	103	124	144	163	183	202	221	240	258	276	293	3
2	021	042	064	085	106	126	147	167	187	207	226	245	264	282	300	2
1	022	043	065	087	108	129	150	171	192	212	232	251	270	289	307	1
-9.0	022	044	066	088	110	132	154	175	196	217	237	257	276	296	314	-9.0
-8.9	0023	0045	0068	0090	0113	0135	0157	0178	0200	0221	0242	0262	0282	0302	0321	-8.9
8	023	046	069	092	115	138	160	182	204	226	247	268	289	309	328	8
7	024	047	071	094	117	141	163	186	209	231	252	274	295	315	335	7
6	024	048	072	096	120	143	167	190	213	235	258	279	301	322	343	6
5	025	049	074	098	122	146	170	194	217	240	263	285	307	329	350	5
4	025	050	075	100	124	149	173	198	221	245	268	291	313	335	357	4
3	026	051	076	102	127	152	177	201	226	250	273	296	320	342	364	3
2	026	052	078	104	129	155	180	205	230	254	279	302	326	349	371	2
1	027	053	079	106	132	158	183	209	234	259	284	308	332	355	378	1
-8.0	027	054	081	107	134	160	187	213	238	264	289	314	338	362	385	-8.0



TABLE IX. *continued.*—For  $D = -19^\circ$ .Y Negative.  $\xi = X - \frac{1}{25} X - \frac{1}{125} X$  — following table.

X Y.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	X. Y.
— 7.9	0027	0055	0082	0109	0136	0163	0190	0216	0243	0269	0294	0319	0344	0369	0392	— 7.9
8	028	056	084	111	139	166	193	220	247	273	299	325	350	375	399	8
7	028	057	085	113	141	169	197	224	251	278	305	331	356	382	406	7
6	029	058	086	115	143	172	200	228	256	283	310	336	363	388	414	6
5	029	058	088	117	146	175	203	232	260	288	315	342	369	395	421	5
4	030	059	089	119	148	178	207	235	264	292	320	348	375	402	428	4
3	030	060	091	121	150	180	210	239	268	297	325	353	381	408	435	3
2	031	061	092	122	153	183	213	243	273	302	331	359	387	415	442	2
1	031	062	093	124	155	186	217	247	277	307	336	365	393	422	449	1
— 7.0	032	063	095	126	158	189	220	251	281	311	341	370	400	428	456	— 7.0
— 6.9	0032	0064	0096	0128	0160	0192	0223	0254	0285	0316	0346	0376	0406	0435	0463	— 6.9
8	033	065	098	130	162	195	226	258	290	321	351	382	412	441	470	8
7	033	066	099	132	165	197	230	262	294	326	357	387	418	448	478	7
6	034	067	101	134	167	200	233	266	298	330	362	393	424	455	485	6
5	034	068	102	136	169	203	236	270	302	335	367	399	430	461	492	5
4	034	069	103	138	172	206	240	273	307	340	372	404	436	468	499	4
3	035	070	105	140	174	209	243	277	311	344	377	410	443	475	506	3
2	035	071	106	142	177	212	246	281	315	349	383	416	449	481	513	2
1	036	072	108	143	179	214	250	285	320	354	388	422	455	488	520	1
— 6.0	036	073	109	145	181	217	253	288	324	359	393	427	461	494	527	— 6.0
— 5.9	0037	0074	0110	0147	0184	0220	0256	0292	0328	0363	0398	0433	0467	0501	0534	— 5.9
8	037	075	112	149	186	223	260	296	332	368	404	439	473	508	541	8
7	038	076	113	151	188	226	263	300	337	373	409	444	480	514	549	7
6	038	076	115	153	191	229	266	304	341	378	414	450	486	521	556	6
5	039	077	116	155	193	232	270	307	345	382	419	456	492	528	563	5
4	039	078	118	157	195	234	273	311	349	387	424	461	498	534	570	4
3	040	079	119	158	198	237	276	315	354	392	430	467	504	541	577	3
2	040	080	120	160	200	240	280	319	358	397	435	473	510	547	584	2
1	041	081	122	162	203	243	283	322	362	401	440	478	517	554	591	1
— 5.0	041	082	123	164	205	246	286	326	366	406	445	484	523	561	598	— 5.0
— 4.9	0042	0083	0125	0166	0207	0248	0289	0330	0371	0411	0450	0490	0529	0567	0605	— 4.9
8	042	084	126	168	210	251	293	334	375	416	456	496	535	574	613	8
7	043	085	128	170	212	254	296	338	379	420	461	501	541	581	620	7
6	043	086	129	172	214	257	299	341	383	425	466	507	547	587	627	6
5	044	087	130	174	217	260	303	345	388	430	471	513	554	594	634	5
4	044	088	132	176	219	263	306	349	392	434	476	518	560	601	641	4
3	045	089	133	177	222	266	309	353	396	439	482	524	566	607	648	3
2	045	090	135	179	224	268	313	357	400	444	487	530	572	614	655	2
1	045	091	136	181	226	271	316	360	405	449	492	535	578	620	662	1
— 4.0	046	092	137	183	229	274	319	364	409	453	497	541	584	627	669	— 4.0
— 3.9	0046	0093	0139	0185	0231	0277	0323	0368	0413	0458	0503	0547	0590	0634	0676	— 3.9
8	047	094	140	187	233	280	326	372	417	463	508	552	596	640	683	8
7	047	094	142	189	236	283	329	375	422	468	513	558	603	647	691	7
6	048	095	143	191	238	286	333	379	426	472	518	564	609	654	698	6
5	048	096	145	193	240	288	336	383	430	477	523	569	615	660	705	5
4	049	097	146	194	243	291	339	387	435	482	529	575	621	667	712	4
3	049	098	147	196	245	294	343	391	439	486	534	581	627	674	719	3
2	050	099	149	198	248	297	346	394	443	491	539	586	633	680	726	2
1	050	100	150	200	250	300	349	398	447	496	544	592	640	687	733	1
3.0	051	101	152	202	252	302	352	402	452	501	549	598	646	693	740	— 3.0



TABLE IX. *continued.*—For  $D = -19^\circ$ .

Y Negative.

$$\xi = X - \frac{1}{25} X - \frac{1}{125} X - \text{following table.}$$

X. Y.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	X. Y.
— 2.9	0051	0102	0153	0204	0255	0305	0356	0406	0456	0505	0555	0603	0652	0700	0748	— 2.9
8	052	103	155	206	257	308	359	410	460	510	560	609	658	707	755	8
7	052	104	156	208	259	311	362	413	464	515	565	615	664	713	762	7
6	053	105	157	210	262	314	366	417	469	520	570	620	670	720	769	6
5	053	106	159	212	264	317	369	421	473	524	576	626	677	727	776	5
4	054	107	160	213	266	320	372	425	477	529	581	632	683	733	783	4
3	054	108	162	215	269	322	376	429	481	534	586	637	689	740	790	3
2	054	109	163	217	271	325	379	432	486	539	591	643	695	746	797	2
1	055	110	164	219	274	328	382	436	490	543	596	649	701	753	804	1
— 2.0	055	111	166	221	276	331	386	440	494	548	602	654	707	760	812	— 2.0
— 1.9	0056	0112	0167	0223	0278	0334	0389	0444	0498	0553	0607	0660	0714	0766	0819	— 1.9
8	056	112	169	225	281	337	392	447	503	558	612	666	720	773	826	8
7	057	113	170	227	283	339	395	451	507	562	617	672	726	780	833	7
6	057	114	172	229	285	342	399	455	511	567	622	677	732	786	840	6
5	058	115	173	230	288	345	402	459	515	572	628	683	738	793	847	5
4	058	116	174	232	290	348	405	463	520	576	633	689	744	800	854	4
3	059	117	176	234	293	351	409	466	524	581	638	694	750	806	861	3
2	059	118	177	236	295	354	412	470	528	586	643	700	756	813	868	2
1	060	119	179	238	297	356	415	474	533	591	648	706	763	819	875	1
— 1.0	060	120	180	240	300	359	419	478	537	595	654	711	769	826	882	— 1.0
— 0.9	0061	0121	0181	0242	0302	0362	0422	0482	0541	0600	0659	0717	0775	0832	0890	— 0.9
8	061	122	183	244	304	365	425	485	545	605	664	723	781	839	897	8
7	062	123	184	246	307	368	429	489	550	610	669	728	787	846	904	7
6	062	124	186	247	309	371	432	493	554	614	674	734	793	852	911	6
5	063	125	187	249	312	374	435	497	558	619	680	740	800	859	918	5
4	063	126	189	251	314	376	439	500	562	624	685	745	806	866	925	4
3	063	127	190	253	316	379	442	504	567	629	690	751	812	872	932	3
2	064	128	191	255	319	382	445	508	571	633	695	757	818	879	939	2
1	064	129	193	257	321	385	448	512	575	638	700	762	824	886	946	1
— 0.0	0065	0130	0194	0259	0323	0388	0452	0516	0579	0643	0706	0768	0830	0892	0953	— 0.0



TABLE X.—For  $D = -19^\circ$ .

Y Positive.

 $\xi = X - \frac{1}{20} X - \frac{1}{240} X$  — following table.

X. Y.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	X. Y.
+ 0.0	0003	0006	0009	0012	0015	0018	0020	0022	0024	0026	0027	0028	0029	0029	0028	+ 0.0
1	004	007	011	014	017	021	024	026	029	031	032	034	035	036	036	1
2	004	008	012	016	020	023	027	030	033	036	038	039	041	042	043	2
3	005	009	014	018	022	026	030	034	037	040	043	045	047	049	050	3
4	005	010	015	020	024	029	034	038	041	045	048	051	053	055	057	4
5	006	011	016	022	027	032	037	041	046	050	053	056	060	062	064	5
6	006	012	018	024	029	035	040	045	050	054	058	062	066	069	071	6
7	006	013	019	026	032	038	043	049	054	059	064	068	072	075	078	7
8	007	014	021	027	034	040	047	053	058	064	069	073	078	082	085	8
+ 0.9	007	015	022	029	036	043	050	057	063	069	074	079	084	089	092	+ 0.9
+ 1.0	0008	0016	0024	0031	0039	0046	0053	0060	0067	0073	0079	0085	0090	0095	0100	+ 1.0
1	008	017	025	033	041	049	057	064	071	078	085	090	096	102	107	1
2	009	018	026	035	043	052	060	068	076	083	090	096	103	108	114	2
3	009	018	028	037	046	055	063	072	080	088	095	102	109	115	121	3
4	010	019	029	039	048	058	067	075	084	092	100	108	115	122	128	4
5	010	020	031	041	050	060	070	079	088	097	105	113	121	128	135	5
6	011	021	032	042	053	063	073	083	093	102	111	119	127	135	142	6
7	011	022	033	044	055	066	076	087	097	107	116	125	133	142	149	7
8	012	023	035	046	058	069	080	090	101	111	121	130	140	148	156	8
+ 1.9	012	024	036	048	060	072	083	094	105	116	126	136	146	155	163	+ 1.9
+ 2.0	0013	0025	0038	0050	0062	0074	0086	0098	0110	0121	0131	0142	0152	0161	0170	+ 2.0
1	013	026	039	052	065	077	090	102	114	126	137	147	158	168	178	1
2	014	027	041	054	067	080	093	106	118	130	142	153	164	175	185	2
3	014	028	042	056	069	083	096	110	122	135	147	159	170	181	192	3
4	014	029	043	058	072	086	100	113	127	140	152	164	176	188	199	4
5	015	030	045	060	074	089	103	117	131	144	157	170	183	195	206	5
6	015	031	046	062	077	092	106	121	135	149	163	176	189	201	213	6
7	016	032	048	063	079	094	110	125	139	154	168	181	195	208	220	7
8	016	033	049	065	081	097	113	128	144	159	173	187	201	214	227	8
+ 2.9	017	034	051	067	084	100	116	132	148	163	178	193	207	221	235	+ 2.9
+ 3.0	0017	0035	0052	0069	0086	0103	0120	0136	0152	0168	0184	0199	0213	0228	0242	+ 3.0
1	018	036	053	071	088	106	123	140	156	173	189	204	220	234	249	1
2	018	036	055	073	091	109	126	144	161	178	194	210	226	241	256	2
3	019	037	056	075	093	112	130	147	165	182	199	216	232	248	263	3
4	019	038	058	077	095	114	133	151	169	187	204	221	238	254	270	4
5	020	039	059	078	098	117	136	155	174	192	210	227	244	261	277	5
6	020	040	060	080	100	120	140	159	178	197	215	233	250	268	284	6
7	021	041	062	082	103	123	143	163	182	201	220	238	256	274	291	7
8	021	042	063	084	105	126	146	166	186	206	225	244	263	281	298	8
+ 3.9	022	043	065	086	107	128	149	170	191	211	230	250	269	287	305	+ 3.9
+ 4.0	0022	0044	0066	0088	0110	0131	0153	0174	0195	0215	0236	0255	0275	0294	0312	+ 4.0
1	023	045	068	090	112	134	156	178	199	220	241	261	281	301	320	1
2	023	046	069	092	114	137	159	181	203	225	246	267	287	307	327	2
3	024	047	070	094	117	140	163	185	208	230	251	272	294	314	334	3
4	024	048	072	096	119	143	166	189	212	234	256	278	300	321	341	4
5	024	049	073	098	122	146	169	193	216	239	262	284	306	327	348	5
6	025	050	075	099	124	148	173	197	220	244	267	290	312	334	355	6
7	025	051	076	101	126	151	176	200	225	249	272	295	318	340	362	7
8	026	052	077	103	129	154	179	204	229	253	277	301	324	347	369	8
+ 4.9	026	053	079	105	131	157	183	208	233	258	283	307	330	354	376	+ 4.9



TABLE X. *continued.*—For  $D = -19^\circ$ .

Y Positive.

$$\xi = X - \frac{1}{20} X - \frac{1}{240} X - \text{following table.}$$

X. Y.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	X. Y.
+ 5.0	0027	0054	0080	0107	0133	0160	0186	0212	0238	0263	0288	0312	0336	0360	0384	+ 5.0
1	027	054	082	109	136	163	189	216	242	268	293	318	343	367	391	1
2	028	055	083	111	138	166	193	219	246	272	298	324	349	374	398	2
3	028	056	084	113	140	168	196	223	250	277	303	329	355	380	405	3
4	029	057	086	114	143	171	199	227	255	282	309	335	361	387	412	4
5	029	058	087	116	145	174	203	231	259	286	314	341	367	394	419	5
6	030	059	089	118	148	177	206	234	263	291	319	346	373	400	426	6
7	030	060	090	120	150	180	209	238	267	296	324	352	380	407	433	7
8	031	061	092	122	152	182	212	242	272	301	329	358	386	413	440	8
+ 5.9	031	062	093	124	155	185	216	246	276	305	335	363	392	420	447	+ 5.9
+ 6.0	0032	0063	0094	0126	0157	0188	0219	0250	0280	0310	0340	0369	0398	0427	0455	+ 6.0
1	032	064	096	128	159	191	222	253	284	315	345	375	404	433	462	1
2	032	065	097	130	162	194	226	257	288	320	350	380	410	440	469	2
3	033	066	099	132	164	197	229	261	293	324	356	386	417	447	476	3
4	033	067	100	133	166	200	232	265	297	329	361	392	423	453	483	4
5	034	068	102	135	169	202	236	268	301	334	366	398	429	460	490	5
6	034	069	103	137	171	205	239	272	306	339	371	403	435	466	497	6
7	035	070	104	139	174	208	242	276	310	343	376	409	441	473	504	7
8	035	071	106	141	176	211	246	280	314	348	381	414	447	480	511	8
+ 6.9	036	072	107	143	178	214	249	284	318	353	387	420	453	486	518	+ 6.9
+ 7.0	0036	0072	0109	0145	0181	0217	0252	0288	0323	0358	0392	0426	0460	0493	0526	+ 7.0
1	037	073	110	147	183	220	256	291	327	362	397	432	466	500	533	1
2	037	074	112	149	185	222	259	295	331	367	402	437	472	506	540	2
3	038	075	113	150	188	225	262	299	336	372	408	443	478	513	547	3
4	038	076	114	152	190	228	265	303	340	376	413	449	484	519	554	4
5	039	077	116	154	192	231	269	306	344	381	418	454	490	526	561	5
6	039	078	117	156	195	234	272	310	348	386	423	460	496	533	568	6
7	040	079	119	158	197	236	275	314	353	391	428	466	503	539	575	7
8	040	080	120	160	200	239	279	318	357	395	434	471	509	546	582	8
+ 7.9	041	081	122	162	202	242	282	322	361	400	439	477	515	553	590	+ 7.9
+ 8.0	0041	0082	0123	0164	0204	0245	0285	0325	0365	0405	0444	0483	0521	0559	0597	+ 8.0
1	042	083	124	166	207	248	289	329	370	410	449	488	527	566	604	1
2	042	084	126	168	209	251	292	333	374	414	454	494	533	572	611	2
3	042	085	127	169	212	254	295	337	378	419	460	500	540	579	618	3
4	043	086	129	171	214	256	299	340	382	424	465	506	546	586	625	4
5	043	087	130	173	216	259	302	344	387	429	470	511	552	592	632	5
6	044	088	131	175	219	262	305	348	391	433	475	517	558	599	639	6
7	044	089	133	177	221	265	308	352	395	438	480	522	564	606	646	7
8	045	090	134	179	223	268	312	356	399	443	486	528	570	612	653	8
+ 8.9	045	090	136	181	226	271	315	360	404	448	491	534	577	619	661	+ 8.9
+ 9.0	0046	0091	0137	0183	0228	0273	0318	0363	0408	0452	0496	0540	0583	0626	0668	+ 9.0
1	046	092	139	185	230	276	322	367	412	457	501	545	589	632	675	1
2	047	093	140	186	233	279	325	371	416	462	507	551	595	639	682	2
3	047	094	141	188	235	282	328	375	421	467	512	557	601	645	689	3
4	048	095	143	190	238	285	332	378	425	471	517	562	607	652	696	4
5	048	096	144	192	240	288	335	382	429	476	522	568	614	659	703	5
6	049	097	146	194	242	290	338	386	434	481	527	574	620	665	710	6
7	049	098	147	196	245	293	342	390	438	485	533	579	626	672	717	7
8	050	099	148	198	247	296	345	394	442	490	538	585	632	678	724	8
+ 9.9	050	100	150	200	249	299	348	397	446	495	543	591	638	685	732	+ 9.9



TABLE X. *continued*.—For  $D = -19^\circ$ .

**Y Positive.**  $\xi = X - \frac{1}{20} X - \frac{1}{240} X$  — following table.

X. Y.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	X. Y.
+10.0	0050	0101	0151	0202	0252	0302	0352	0401	0451	0500	0548	0596	0644	0692	0739	+10.0
1	051	102	153	204	254	305	355	405	455	504	553	602	650	698	746	1
2	051	103	154	205	256	308	358	409	459	509	559	608	656	705	753	2
3	052	104	156	207	259	310	362	412	463	514	564	614	663	712	760	3
4	052	105	157	209	261	313	365	416	468	518	569	619	669	718	767	4
5	053	106	158	211	264	316	368	420	472	523	574	625	675	725	774	5
6	053	107	160	213	266	319	371	424	476	528	579	630	681	732	781	6
7	054	108	161	215	268	322	375	428	480	533	585	636	687	738	788	7
8	054	108	163	217	271	324	378	431	485	537	590	642	694	745	796	8
+10.9	055	109	164	219	273	327	381	435	489	542	595	648	700	752	803	+10.9
+11.0	0055	0110	0166	0221	0275	0330	0385	0439	0493	0547	0600	0653	0706	0758	0810	+11.0
1	056	111	167	222	278	333	388	443	498	552	605	659	712	765	817	1
2	056	112	168	224	280	336	391	447	502	556	611	665	718	771	824	2
3	057	113	170	226	282	339	395	450	506	561	616	670	724	778	831	3
4	057	114	171	228	285	342	398	454	510	566	621	676	730	785	838	4
5	058	115	173	230	287	344	401	458	515	571	626	682	737	791	845	5
6	058	116	174	232	290	347	405	462	519	575	632	687	743	798	852	6
7	059	117	176	234	292	350	408	466	523	580	637	693	749	804	860	7
8	059	118	177	236	294	353	411	469	527	585	642	699	755	811	867	8
+11.9	059	119	178	238	297	356	415	473	532	590	647	704	761	818	874	+11.9
+12.0	0060	0120	0180	0240	0299	0359	0418	0477	0536	0594	0652	0710	0767	0824	0881	+12.0
1	060	121	181	241	301	362	421	481	540	599	658	716	774	831	888	1
2	061	122	183	243	304	364	424	484	544	604	663	721	780	838	895	2
3	061	123	184	245	306	367	428	488	549	608	668	727	786	844	902	3
4	062	124	185	247	309	370	431	492	553	613	673	733	792	851	909	4
5	062	125	187	249	311	373	434	496	557	618	678	738	798	858	916	5
6	063	126	188	251	313	376	438	500	561	623	684	744	804	864	923	6
7	063	126	190	253	316	378	441	503	566	627	689	750	810	871	931	7
8	064	127	191	255	318	381	444	507	570	632	694	756	817	878	938	8
+12.9	064	128	192	257	320	384	448	511	574	637	699	761	823	884	945	+12.9
+13.0	0065	0129	0194	0258	0323	0387	0451	0515	0578	0642	0704	0767	0829	0891	0952	+13.0



TABLE XI.—For  $D = -19^\circ$ . $\eta$  Negative. $X = \xi + \frac{1}{20}\xi + \text{following table.}$ 

$\xi$	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	$\xi$
$\eta$														$\eta$
—13.0	·0008	·0016	·0023	·0031	·0038	·0045	·0052	·0058	·0064	·0070	·0075	·0079	·0083	—13.0
—12.9	·0008	·0017	·0025	·0033	·0041	·0048	·0055	·0062	·0069	·0075	·0080	·0086	·0090	—12.9
8	009	018	026	035	043	051	059	067	074	080	086	092	097	8
7	009	019	028	037	046	054	063	071	078	086	092	098	104	7
6	010	020	030	039	048	058	066	075	083	091	098	104	110	6
5	010	021	031	041	051	061	070	079	088	096	104	111	117	5
4	011	022	033	043	054	064	074	083	092	101	109	117	124	4
3	011	023	034	045	056	067	077	088	097	106	115	123	131	3
2	012	024	036	048	059	070	081	092	102	112	121	129	138	2
1	012	025	037	050	062	073	085	096	107	117	127	136	145	1
—12.0	013	026	039	052	064	076	088	100	111	122	132	142	151	—12.0
—11.9	·0014	·0027	·0040	·0054	·0067	·0080	·0092	·0104	·0116	·0127	·0138	·0148	·0158	—11.9
8	014	028	042	056	069	083	096	108	121	133	144	154	165	8
7	015	029	044	058	072	086	099	113	125	138	150	161	172	7
6	015	030	045	060	075	089	103	117	130	143	155	167	178	6
5	016	031	047	062	077	092	107	121	135	148	161	173	185	5
4	016	032	048	064	080	095	110	125	140	154	167	180	192	4
3	017	033	050	066	083	098	114	129	144	159	173	186	199	3
2	017	034	052	068	085	102	118	134	149	164	178	192	206	2
1	018	035	053	070	088	105	121	138	154	169	184	199	212	1
—11.0	018	036	055	073	090	108	125	142	158	174	190	205	219	—11.0
—10.9	·0019	·0037	·0056	·0075	·0093	·0111	·0129	·0146	·0163	·0180	·0196	·0211	·0226	—10.9
8	019	039	058	077	096	114	132	150	168	185	202	218	233	8
7	020	040	059	079	098	117	136	154	173	190	207	224	240	7
6	020	041	061	081	101	120	140	159	177	195	213	230	246	6
5	021	042	062	083	104	124	143	163	182	201	219	236	253	5
4	021	043	064	085	106	127	147	167	187	206	225	243	260	4
3	022	044	066	087	109	130	151	171	191	211	230	249	267	3
2	022	045	067	089	011	133	154	176	196	216	236	255	274	2
1	023	046	069	092	114	136	158	180	201	222	242	261	281	1
—10.0	024	047	070	094	117	139	162	184	206	227	248	268	288	—10.0
—9.9	·0024	·0048	·0072	·0096	·0119	·0142	·0165	·0188	·0210	·0232	·0253	·0274	·0294	—9.9
8	025	049	074	098	122	146	169	192	215	237	259	280	301	8
7	025	050	075	100	124	149	173	196	220	243	265	287	308	7
6	026	051	077	102	127	152	176	201	224	248	271	293	315	6
5	026	052	078	104	130	155	180	205	229	253	276	299	322	5
4	027	053	080	106	132	158	184	209	234	258	282	305	328	4
3	027	054	081	108	135	161	187	213	239	264	288	312	335	3
2	028	055	083	110	138	164	191	217	243	269	294	318	342	2
1	028	056	084	112	140	168	195	222	248	274	300	324	349	1
—9.0	029	057	086	114	143	171	199	226	253	279	305	331	356	—9.0
—8.9	·0029	·0058	·0088	·0117	·0145	·0174	·0202	·0230	·0258	·0285	·0311	·0337	·0362	—8.9
8	030	060	089	119	148	177	206	234	262	290	317	343	369	8
7	030	061	091	121	151	180	210	238	267	295	323	350	376	7
6	031	062	092	123	153	183	213	243	272	300	328	356	383	6
5	031	063	094	125	156	186	217	247	276	306	334	362	390	5
4	032	064	096	127	159	190	220	251	281	311	340	368	396	4
3	032	065	097	129	161	193	224	255	286	316	346	375	403	3
2	033	066	099	131	164	196	228	259	290	321	352	381	410	2
1	034	067	100	133	166	199	232	264	295	327	357	387	417	1
—8.0	034	068	102	136	169	202	235	268	300	332	363	394	424	—8.0



TABLE XI. *continued.*—For  $D = -19^\circ$ . $\eta$  Negative. $X = \xi + \frac{1}{20}\xi + \text{following table.}$ 

$\xi.$ $\eta.$	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	$\xi.$ $\eta.$
— 7.9	0035	0069	0103	0138	0172	0205	0239	0272	0305	0337	0369	0400	0431	— 7.9
8	035	070	105	140	174	209	243	276	310	342	375	406	438	8
7	036	071	107	142	177	212	246	280	314	348	380	413	444	7
6	036	072	108	144	180	215	250	285	319	353	386	419	451	6
5	037	073	110	146	182	218	254	289	324	358	392	425	458	5
4	037	074	111	148	185	221	257	293	328	363	398	432	465	4
3	038	075	113	150	187	224	261	297	333	369	404	438	472	3
2	038	076	114	152	190	228	265	302	338	374	409	444	479	2
1	039	077	116	154	193	231	268	306	343	379	415	451	485	1
— 7.0	039	078	118	157	195	234	272	310	347	384	421	457	492	— 7.0
— 6.9	0040	0080	0119	0159	0198	0237	0276	0314	0352	0390	0427	0463	0499	— 6.9
8	040	081	121	161	201	240	279	318	357	395	432	470	506	8
7	041	082	122	163	203	243	283	322	362	400	438	476	513	7
6	041	083	124	165	206	246	287	327	366	405	444	482	520	6
5	042	084	126	167	208	250	290	331	371	411	450	488	526	5
4	042	085	127	169	211	253	294	335	376	416	456	495	533	4
3	043	086	129	171	214	256	298	339	380	421	462	501	540	3
2	044	087	130	173	216	259	301	344	385	426	467	507	547	2
1	044	088	132	176	219	262	305	348	390	432	473	514	554	1
— 6.0	045	089	133	178	222	265	309	352	395	437	479	520	561	— 6.0
— 5.9	0045	0090	0135	0180	0224	0269	0312	0356	0399	0442	0485	0526	0568	— 5.9
8	046	091	137	182	227	272	316	360	404	448	490	533	574	8
7	046	092	138	184	230	275	320	365	409	453	496	539	581	7
6	047	093	140	186	232	278	324	369	414	458	502	545	588	6
5	047	094	141	188	235	281	327	373	418	463	508	552	595	5
4	048	095	143	190	238	284	331	377	423	469	514	558	602	4
3	048	096	144	192	240	288	335	382	428	474	519	564	609	3
2	049	097	146	194	243	291	338	386	433	479	525	571	615	2
1	049	098	148	197	245	294	342	390	437	484	531	577	622	1
— 5.0	050	100	149	199	248	297	346	394	442	490	537	583	629	— 5.0
— 4.9	0050	0101	0151	0201	0251	0300	0349	0398	0447	0495	0542	0590	0636	— 4.9
8	051	102	152	203	253	303	353	403	452	500	548	596	643	8
7	051	103	154	205	256	306	357	407	456	506	554	602	650	7
6	052	104	156	207	259	310	360	411	461	511	560	609	657	6
5	052	105	157	209	261	313	364	415	466	516	566	615	663	5
4	053	106	159	211	264	316	368	420	471	521	572	621	670	4
3	054	107	160	214	266	319	372	424	475	527	577	628	677	3
2	054	108	162	216	269	322	375	428	480	532	583	634	684	2
1	055	109	163	218	272	326	379	432	485	537	589	640	691	1
— 4.0	055	110	165	220	274	329	383	436	490	542	595	646	698	— 4.0
— 3.9	0056	0111	0167	0222	0277	0332	0386	0440	0494	0548	0600	0653	0705	— 3.9
8	056	112	168	224	280	335	390	445	499	553	606	659	711	8
7	057	113	170	226	282	338	394	449	504	558	612	665	718	7
6	057	114	171	228	285	341	397	453	509	564	618	672	725	6
5	058	115	173	230	288	344	401	457	513	569	624	678	732	5
4	058	116	174	232	290	348	405	462	518	574	630	684	739	4
3	059	117	176	235	293	351	408	466	523	579	635	691	746	3
2	059	118	178	237	296	354	412	470	528	585	641	697	753	2
1	060	120	179	239	298	357	416	474	532	590	647	703	759	1
— 3.0	060	121	181	241	301	360	420	478	537	595	653	710	766	— 3.0



TABLE XI. *continued.*—For  $D = -19^\circ$ . $\eta$  Negative. $X = \xi + \frac{1}{20}\xi + \text{following table.}$ 

$\xi.$ $\eta.$	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	$\xi.$ $\eta.$
— 2.9	0061	0122	0182	0243	0303	0364	0423	0483	0542	0600	0659	0716	0773	— 2.9
8	061	123	184	245	306	367	427	487	547	606	664	722	780	8
7	062	124	186	247	309	370	431	491	551	611	670	729	787	7
6	062	125	187	249	311	373	434	496	556	616	676	735	794	6
5	063	126	189	252	314	376	438	500	561	622	682	741	801	5
4	064	127	190	254	317	379	442	504	566	627	688	748	808	4
3	064	128	192	256	319	382	445	508	570	632	693	754	814	3
2	065	129	194	258	322	386	449	512	575	638	699	761	821	2
1	065	130	195	260	325	389	453	517	580	643	705	767	828	1
— 2.0	066	131	197	262	327	392	457	521	585	648	711	773	835	— 2.0
— 1.9	0066	0132	0198	0264	0330	0395	0460	0525	0589	0653	0717	0780	0842	— 1.9
8	067	133	200	266	332	398	464	529	594	659	722	786	849	8
7	067	134	202	268	335	402	468	534	599	664	728	792	856	7
6	068	135	203	270	338	405	471	538	604	669	734	799	862	6
5	068	136	205	273	340	408	475	542	608	674	740	805	869	5
4	069	138	206	275	343	411	479	546	613	680	746	811	876	4
3	069	139	208	277	346	414	482	550	618	685	752	818	883	3
2	070	140	209	279	348	417	486	555	623	690	758	824	890	2
1	070	141	211	281	351	421	490	559	627	696	763	830	897	1
— 1.0	071	142	213	283	354	424	494	563	632	701	769	837	904	— 1.0
— 0.9	0071	0143	0214	0285	0356	0427	0497	0567	0637	0706	0775	0843	0911	— 0.9
8	072	144	216	287	359	430	501	572	642	712	781	849	917	8
7	072	145	217	290	362	433	505	576	646	717	786	856	924	7
6	073	146	219	292	364	436	508	580	651	722	792	862	931	6
5	074	147	220	294	367	440	512	584	656	727	798	868	938	5
4	074	148	222	296	370	443	516	588	661	733	804	875	945	4
3	075	149	224	298	372	446	520	593	666	738	810	881	952	3
2	075	150	225	300	375	449	523	597	670	743	816	887	959	2
1	076	151	227	302	377	452	527	601	675	749	822	894	966	1
— 0.0	0076	0152	0228	0304	0380	0456	0531	0606	0680	0754	0827	0900	0973	— 0.0



TABLE XII.—For  $D = -19^\circ$ . $\eta$  Positive. $X = \xi + \frac{1}{20}\xi + \frac{1}{140}\xi + \text{following table.}$ 

$\xi.$ $\eta.$	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	$\xi.$ $\eta.$
+ 0.0	0005	0010	0014	0019	0023	0027	0031	0034	0037	0040	0042	0043	0044	+ 0.0
1	005	011	016	021	026	030	034	038	042	045	047	049	051	1
2	006	012	017	023	028	033	038	042	047	050	053	056	058	2
3	006	013	019	025	031	036	042	047	051	055	059	062	064	3
4	007	014	020	027	034	040	046	051	056	061	065	068	071	4
5	007	015	022	029	036	043	049	055	061	066	071	075	078	5
6	008	016	024	031	039	046	053	059	066	071	077	081	085	6
7	008	017	025	034	042	049	057	064	070	077	082	088	092	7
8	009	018	027	036	044	052	060	068	075	082	088	094	099	8
+ 0.9	010	019	028	038	047	056	064	072	080	087	094	100	106	+ 0.9
+ 1.0	0010	0020	0030	0040	0049	0059	0068	0076	0085	0092	0100	0107	0113	+ 1.0
1	011	021	032	042	052	062	071	081	090	098	106	113	120	1
2	011	022	033	044	055	065	075	085	094	103	112	119	126	2
3	012	023	035	046	057	068	079	089	099	108	117	126	133	3
4	012	024	036	048	060	071	083	093	104	114	123	132	140	4
5	013	025	038	050	063	075	086	098	109	119	129	138	147	5
6	013	026	040	053	065	078	090	102	113	124	135	145	154	6
7	014	028	041	055	068	081	094	106	118	130	141	151	161	7
8	014	029	043	057	071	084	097	110	123	135	146	158	168	8
+ 1.9	015	030	044	059	073	087	101	115	128	140	152	164	175	+ 1.9
+ 2.0	0015	0031	0046	0061	0076	0090	0105	0119	0132	0146	0158	0170	0182	+ 2.0
1	016	032	048	063	079	094	108	123	137	151	164	177	189	1
2	016	033	049	065	081	097	112	127	142	156	170	183	196	2
3	017	034	051	068	084	100	116	132	147	162	176	189	202	3
4	017	035	052	070	087	103	120	136	152	167	182	196	209	4
5	018	036	054	072	089	106	123	140	156	172	187	202	216	5
6	019	037	056	074	092	110	127	144	161	177	193	209	223	6
7	019	038	057	076	095	113	131	149	166	183	199	215	230	7
8	020	039	059	078	097	116	135	153	171	188	205	221	237	8
+ 2.9	020	040	060	080	100	119	138	157	175	193	211	228	244	+ 2.9
+ 3.0	0021	0041	0062	0082	0102	0122	0142	0161	0180	0199	0217	0234	0251	+ 3.0
1	021	042	064	084	105	126	146	166	185	204	222	240	258	1
2	022	043	065	087	108	129	150	170	190	209	228	247	265	2
3	022	044	067	089	110	132	153	174	195	215	234	253	272	3
4	023	046	068	091	113	135	157	178	199	220	240	260	278	4
5	023	047	070	093	116	138	161	183	204	225	246	266	285	5
6	024	048	072	095	118	142	164	187	209	230	252	272	292	6
7	024	049	073	097	121	145	168	191	214	236	258	279	299	7
8	025	050	075	099	124	148	172	195	218	241	263	285	306	8
+ 3.9	025	051	076	102	126	151	176	200	223	246	269	292	313	+ 3.9
+ 4.0	0026	0052	0078	0104	0129	0154	0179	0204	0228	0252	0275	0298	0320	+ 4.0
1	027	053	079	106	132	158	183	208	233	257	281	304	327	1
2	027	054	081	108	134	161	187	212	238	262	287	311	334	2
3	028	055	083	110	137	164	190	217	242	268	293	317	340	3
4	028	056	084	112	140	167	194	221	247	273	299	323	347	4
5	029	057	086	114	142	170	198	225	252	278	304	330	354	5
6	029	058	087	116	145	174	202	229	257	284	310	336	361	6
7	030	059	089	118	148	177	205	234	262	289	316	342	368	7
8	030	060	091	121	150	180	209	238	266	294	322	349	375	8
+ 4.9	031	062	092	123	153	183	213	242	271	300	328	355	382	+ 4.9



TABLE XII. *continued.*—For  $D = -19^\circ$ .

$\eta$  Positive.  $X = \xi + \frac{1}{20}\xi + \frac{1}{140}\xi +$  following table.

$\xi.$ $\eta.$	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	$\xi.$ $\eta.$
+ 5.0	0031	0063	0094	0125	0156	0186	0216	0246	0276	0305	0334	0362	0389	+ 5.0
1	032	064	095	127	158	189	220	251	281	310	339	368	396	1
2	032	065	097	129	161	193	224	255	286	316	345	374	403	2
3	033	066	099	131	164	196	228	259	290	321	351	381	410	3
4	033	067	100	133	166	199	231	263	295	326	357	387	417	4
5	034	068	102	136	169	202	235	268	300	332	363	394	424	5
6	034	069	103	138	172	205	239	272	305	337	369	400	431	6
7	035	070	105	140	174	209	242	276	309	342	375	406	437	7
8	036	071	106	142	177	212	246	280	314	348	380	413	444	8
+ 5.9	036	072	108	144	180	215	250	285	319	353	386	419	451	+ 5.9
+ 6.0	0037	0073	0110	0146	0182	0218	0254	0289	0324	0358	0392	0425	0458	+ 6.0
1	037	074	111	148	185	221	258	293	329	364	398	432	465	1
2	038	075	113	150	188	225	261	298	334	369	404	438	472	2
3	038	076	115	152	190	228	265	302	338	374	410	445	479	3
4	039	078	116	155	193	231	269	306	343	380	416	451	486	4
5	039	079	118	157	196	234	272	310	348	385	422	458	493	5
6	040	080	119	159	198	237	276	315	353	390	427	464	500	6
7	040	081	121	161	201	241	280	319	358	396	433	470	507	7
8	041	082	123	163	204	244	284	323	362	401	439	477	514	8
+ 6.9	041	083	124	165	206	247	287	327	367	406	445	483	521	+ 6.9
+ 7.0	0042	0084	0126	0168	0209	0250	0291	0332	0372	0412	0451	0490	0528	+ 7.0
1	042	085	127	170	212	253	295	336	377	417	457	496	534	1
2	043	086	129	172	214	257	298	340	381	422	463	502	541	2
3	044	087	131	174	217	260	302	344	386	428	469	509	548	3
4	044	088	132	176	220	263	306	349	391	433	474	515	555	4
5	045	089	134	178	222	266	310	353	396	438	480	521	562	5
6	045	090	135	180	225	269	314	357	401	444	486	528	569	6
7	046	091	137	182	228	273	317	362	406	449	492	534	576	7
8	046	092	139	184	230	276	321	366	410	454	498	541	583	8
+ 7.9	047	094	140	187	233	279	325	370	415	460	504	547	590	+ 7.9
+ 8.0	0047	0095	0142	0189	0236	0282	0328	0374	0420	0465	0510	0554	0597	+ 8.0
1	048	096	143	191	238	285	332	379	425	470	516	560	604	1
2	048	097	145	193	241	289	336	383	430	476	521	566	611	2
3	049	098	147	195	244	292	340	387	434	481	527	573	618	3
4	049	099	148	197	246	295	343	392	439	486	533	579	625	4
5	050	100	150	200	249	298	347	396	444	492	539	586	632	5
6	050	101	151	202	252	301	351	400	449	497	545	592	639	6
7	051	102	153	204	254	305	355	404	454	502	551	598	646	7
8	052	103	155	206	257	308	358	408	458	508	556	605	652	8
+ 8.9	052	104	156	208	260	311	362	413	463	513	562	611	659	+ 8.9
+ 9.0	0053	0105	0158	0210	0262	0314	0366	0417	0468	0518	0568	0618	0666	+ 9.0
1	053	106	159	212	265	318	370	421	473	524	574	624	673	1
2	054	107	161	214	268	321	373	426	478	529	580	630	680	2
3	054	108	163	217	270	324	377	430	482	534	586	637	687	3
4	055	110	164	219	273	327	381	434	487	540	592	643	694	4
5	055	111	166	221	276	330	385	438	492	545	598	650	701	5
6	056	112	167	223	278	334	388	443	497	550	604	656	708	6
7	056	113	169	225	281	337	392	447	502	556	610	663	715	7
8	057	114	171	227	284	340	396	451	506	561	616	669	722	8
+ 9.9	057	115	172	230	286	343	400	456	511	566	621	675	729	+ 9.9



TABLE XII. *continued.*—For  $D = -19^\circ$ . $\eta$  Positive. $X = \xi + \frac{1}{20}\xi + \frac{1}{140}\xi + \text{following table.}$ 

$\xi.$ $\eta.$	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	$\xi.$ $\eta.$
+10.0	0058	0116	0174	0232	0289	0346	0403	0460	0516	0572	0627	0682	0736	+10.0
1	059	117	176	234	292	350	407	464	521	577	633	688	743	1
2	059	118	177	236	294	353	411	468	526	582	639	695	750	2
3	060	119	179	238	297	356	414	473	531	588	645	701	757	3
4	060	120	180	240	300	359	418	477	535	593	651	708	764	4
5	061	121	182	242	302	362	422	481	540	598	657	714	771	5
6	061	122	184	244	305	366	426	486	545	604	662	720	778	6
7	062	123	185	247	308	369	430	490	550	609	668	727	785	7
8	062	124	187	249	310	372	433	494	555	614	674	733	792	8
+10.9	063	126	188	251	313	375	437	498	560	620	680	740	798	+10.9
+11.0	0063	0127	0190	0253	0316	0378	0441	0503	0564	0625	0686	0746	0805	+11.0
1	064	128	192	255	319	382	444	507	569	630	692	752	812	1
2	064	129	193	257	321	385	448	511	574	636	698	759	819	2
3	065	130	195	259	324	388	452	516	579	641	704	765	826	3
4	065	131	196	262	327	391	456	520	584	647	710	772	833	4
5	066	132	198	264	329	394	459	524	588	652	716	778	840	5
6	067	133	200	266	332	398	463	528	593	657	722	785	847	6
7	067	134	201	268	335	401	467	533	598	663	727	791	854	7
8	068	135	203	270	337	404	471	537	603	668	733	798	861	8
+11.9	068	136	204	272	340	407	474	541	608	674	739	804	868	+11.9
+12.0	0069	0137	0206	0274	0343	0411	0478	0546	0612	0679	0745	0810	0875	+12.0
1	069	138	208	277	345	414	482	550	617	684	751	817	882	1
2	070	140	209	279	348	417	486	554	622	690	757	823	889	2
3	070	141	211	281	351	420	490	558	627	695	763	830	896	3
4	071	142	212	283	353	424	493	563	632	700	769	836	903	4
5	071	143	214	285	356	427	497	567	637	706	774	842	910	5
6	072	144	216	287	359	430	501	571	641	711	780	849	917	6
7	072	145	217	290	361	433	504	576	646	716	786	855	924	7
8	073	146	219	292	364	436	508	580	651	722	792	862	931	8
+12.9	074	147	220	294	367	440	512	584	656	727	798	868	938	+12.9
+13.0	0074	0148	0222	0296	0370	0443	0516	0588	0661	0733	0804	0875	0945	+13.0







# HYDERABAD ASTROGRAPHIC CATALOGUE

## TABLES

FOR THE CONVERSION OF

MEASURED DIAMETERS OF THE STAR-IMAGES

IN

ZONE  $-19^{\circ}$

INTO

STELLAR PHOTOGRAPHIC MAGNITUDES BY  
MEANS OF THE FORMULÆ

$$m = a - 1.09 \sqrt{d}$$



Table for converting Diameters ( $d$ ) into Stellar Magnitudes ( $m$ ) by the formula  $m = a - 1.09\sqrt{d}$ . $a = 15.1$  to  $16.4$ .

$\begin{smallmatrix} a \\ d \end{smallmatrix}$	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	$\begin{smallmatrix} a \\ d \end{smallmatrix}$
8	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	8
9	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	9
10	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	10
11	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	11
12	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12
13	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	13
14	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	14
15	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	15
16	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	16
17	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	17
18	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	18
19	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	19
20	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	20
21	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	21
22	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	22
23	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	23
24	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	24
25	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	25
26	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	26
27	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	27
28	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	28
29	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	29
30	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	30
31	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	31
32	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	32
33	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	33
34	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	34
35	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	35
36	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	36
37	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	37
38	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	38
39	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	39
40	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	40
41	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	41
42	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	42
43	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	43
44	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	44
45	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	45
46	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	46
47	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	47
48	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	48
49	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	49
50	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	50
55	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	55
60	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	60
65	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	65
70	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	70
75	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	75
80	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	80
85	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	85
90	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	90
95	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	95
100	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	100
110	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	110
120	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	120
130	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	130
$\begin{smallmatrix} d \\ a \end{smallmatrix}$	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3	16.4	$\begin{smallmatrix} d \\ a \end{smallmatrix}$



Table for converting Diameters ( $d$ ) into Stellar Magnitudes ( $m$ ) by the formula  $m=a-1.09\sqrt{d}$ . $a=16.5$  to  $17.8$ .

$\begin{smallmatrix} a \\ d \end{smallmatrix}$	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	$\begin{smallmatrix} a \\ d \end{smallmatrix}$
8	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	8
9	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	9
10	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	10
11	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	11
12	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	12
13	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	13
14	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	14
15	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	15
16	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4	16
17	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	17
18	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	18
19	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	19
20	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	20
21	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	21
22	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	22
23	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	23
24	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	24
25	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	25
26	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	26
27	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	27
28	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	28
29	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	29
30	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	30
31	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	31
32	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	32
33	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	33
34	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	11.4	34
35	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	35
36	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3	36
37	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	37
38	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	38
39	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	39
40	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	40
41	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	41
42	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	42
43	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	43
44	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	44
45	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	45
46	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	46
47	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	47
48	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	48
49	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	49
50	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	50
55	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	55
60	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3	9.4	60
65	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	65
70	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	70
75	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	75
80	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	80
85	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	85
90	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	90
95	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	95
100	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	100
110	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	110
120	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	120
130	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	130
$\begin{smallmatrix} d \\ a \end{smallmatrix}$	16.5	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	$\begin{smallmatrix} d \\ a \end{smallmatrix}$







# HYDERABAD ASTROGRAPHIC CATALOGUE, 1900

ZONE  $-19^{\circ}$

## MEASURES OF RECTANGULAR CO-ORDINATES AND DIAMETERS OF STAR-IMAGES

ON PHOTOGRAPHS TAKEN AT THE NIZAMIAH OBSERVATORY,  
HYDERABAD



## EXPLANATION OF THE COLUMNS.

The heading of each plate gives the approximate R.A. of the centre, the number of the plate in the Hyderabad series, the date of exposure, the provisional constants by means of which the measures may be converted into standard co-ordinates (see Introduction, Sections VII., VIII.), and the formula connecting magnitude and diameter (see Introduction, Section V.).

The first column gives a reference number which is purely arbitrary ; in order to designate a star it is only necessary to state the zone and the number, thus,  $-19^{\circ}$ , 7151 ; neither the plate number nor the R.A. of the plate centre need be stated. Since a gap is always left between the last number of any plate and the first number of the next following plate, there are many numbers which are not allotted to stars ; thus there is no star  $-19^{\circ}$ , 7140.

An asterisk attached to the number in this column indicates that the star is amongst those stars selected from the Algiers Astronomische Gesellschaft Catalogue, the standard co-ordinates of which are given on pages 179-209 of this volume.

The second column gives the measured diameter, estimated in units of  $0''.15$ , these diameters may be converted into magnitudes by means of the formula printed at the head of each plate.

The third and fourth columns give the measured co-ordinates of the stars, denoted by  $x$ ,  $y$ , the directions of the co-ordinate axes being approximately those of increasing R.A. and S. Declination, and the origin being the corner of the réseau : the plate centre is approximately at the point (13, 13).

The stars are arranged in the order of the value of the  $x$  co-ordinate for each zone of one unit of  $y$  (approximately  $5'$ ). Each printed measure is the mean of at least two independent bisections of the star-image made in positions of the plate differing by  $180^{\circ}$ .



**R.A. 0<sup>h</sup> 4<sup>m</sup>**

Plate 894; 1916 Dec. 15.

*Provisional Constants.*A B C  
-02551 +00650 +2070D E F  
-00628 -02554 -1809 $Mag.=15.8-1.09\sqrt{d}$ 

No.	d	x	y
1	11	1.598	0.744
2	11	4.513	0.764
3	8	7.042	0.051
4*	82	7.862	0.100
5	20	11.300	0.824
6	23	19.592	0.834
7	8	20.818	0.684
8	20	23.856	0.868
9	18	24.234	0.894
10	18	0.194	1.104
11	10	1.544	1.726
12	13	11.662	1.096
13	8	19.266	1.850
14	14	2.670	2.197
15*	30	6.058	2.939
16*	61	11.370	2.294
17	15	16.203	2.451
18	9	18.118	2.160
19*	40	20.399	2.021
20	10	6.876	3.961
21	8	9.418	3.484
22	24	17.200	3.899
23	13	17.462	3.417
24	13	17.758	3.121
25	12	21.669	3.034
26	13	2.767	4.642
27	13	6.882	4.333
28	10	14.447	4.178
29	20	19.664	4.940
30	10	22.900	4.860
31*	32	23.630	4.324
32	8	0.615	5.994
33	8	7.189	5.841
34	10	7.594	5.892
35	21	8.144	5.727
36	9	18.588	5.628
37	13	21.666	5.450
38	14	7.093	6.215
39	14	7.226	6.300
40	8	13.431	6.210
41	8	13.630	6.988
42*	35	19.908	6.833
43*	79	21.436	6.464
44	20	22.046	6.298
45	11	22.823	6.000
46	8	23.304	6.676
47	15	23.338	6.922
48	19	24.386	6.902
49	9	25.420	6.021
50	10	1.359	7.188
51	12	1.942	7.092
52	13	3.968	7.180
53	8	4.261	7.073
54*	60	5.452	7.742
55	16	12.084	7.726

56	13	18.145	7.632	128	12	21.626	15.437
57	11	18.496	7.862	129	20	2.889	16.994
58	8	18.734	7.228	130*	31	6.540	16.666
59	25	18.915	7.101	131	18	6.922	16.998
60	8	0.644	8.419	132*	49	7.272	16.884
61	17	1.734	8.458	133	10	8.062	16.102
62	19	5.080	8.309	134	12	9.834	16.198
63	8	12.170	8.570	135	13	17.934	16.518
64	10	12.393	8.870	136	20	20.183	16.682
65	22	21.880	8.200	137	20	0.360	17.224
66	23	22.614	8.164	138	26	1.580	17.440
67*	35	1.400	9.405	139	9	2.913	17.496
68	9	3.026	9.392	140	9	3.482	17.242
69*	30	3.591	9.330	141	16	8.866	17.858
70	10	4.384	9.121	142	9	9.133	17.030
71	20	10.546	9.222	143	21	12.651	17.630
72	8	12.419	9.457	144	31	15.994	17.355
73	10	15.174	9.550	145	33	16.254	17.310
74	26	23.810	9.582	146	9	16.644	17.351
75	13	1.942	10.876	147	13	18.686	17.195
76	19	3.592	10.988	148	11	23.680	17.894
77	12	5.816	10.666	149	9	1.074	18.098
78	10	17.382	10.800	150	9	2.359	18.480
79	17	22.692	10.398	151	8	4.630	18.275
80	10	3.670	11.756	152	10	10.792	18.778
81	11	4.045	11.650	153	18	14.271	18.332
82	9	8.902	11.218	154	12	15.498	18.894
83	15	8.912	11.433	155	13	16.034	18.192
84	11	12.371	11.969	156	8	21.451	18.568
85	27	1.846	12.818	157	20	21.640	18.844
86	20	6.042	12.088	158	12	5.915	19.576
87	19	7.168	12.588	159	8	7.856	19.654
88	11	7.642	12.461	160	12	14.324	19.684
89	12	9.542	12.520	161	8	17.882	19.053
90	10	19.984	12.432	162	22	20.522	19.090
91*	21	25.048	12.342	163	8	24.756	19.073
92	10	25.150	12.710	164	10	15.648	20.047
93	10	25.570	12.017	165	25	19.106	20.682
94	13	0.454	13.486	166	12	19.394	20.686
95	8	1.562	13.742	167	13	20.264	20.065
96	16	4.242	13.524	168	12	1.212	21.641
97	9	5.896	13.782	169	17	3.008	21.152
98	10	12.666	13.354	170	10	9.969	21.735
99	8	12.796	13.314	171*	35	10.874	21.434
100*	36	13.630	13.027	172*	35	11.046	21.564
101	12	14.498	13.248	173	13	11.534	21.255
102*	42	18.142	13.900	174	8	17.434	21.678
103	12	18.254	13.662	175	16	19.411	21.060
104	17	18.490	13.301	176	8	20.754	21.672
105	25	18.542	13.286	177*	33	22.818	21.193
106*	33	22.192	13.456	178	8	0.934	22.286
107	8	23.563	13.561	179	33	4.924	22.546
108	15	0.600	14.298	180	10	6.026	22.202
109	10	1.578	14.410	181	8	12.700	22.503
110	31	2.882	14.242	182	10	17.189	22.506
111	14	5.097	14.540	183	14	23.735	22.663
112	10	7.045	14.462	184*	38	1.386	23.864
113	12	7.219	14.532	185	8	3.616	23.395
114	9	7.345	14.072	186	17	13.752	23.488
115	9	8.280	14.804	187	15	14.639	23.183
116	10	9.013	14.336	188	26	18.402	23.591
117	11	9.565	14.774	189	10	18.526	23.047
118	10	14.550	14.577	190	8	20.823	23.051
119*	58	19.855	14.231	191	16	21.692	23.973
120	10	20.720	14.253	192	30	0.628	24.170
121	14	3.546	15.967	193	10	5.051	24.826
122*	46	9.892	15.265	194	11	9.298	24.023
123	20	13.204	15.921	195	20	13.282	24.782
124	10	14.858	15.112	196	11	16.048	24.573
125	17	17.890	15.740	197	9	16.403	24.508
126*	43	19.574	15.471	198	8	17.078	24.662
127	18	19.600	15.824	199	8	17.205	24.293

**R.A. 0<sup>h</sup> 12<sup>m</sup>**

Plate 888; 1916 Dec. 14.

*Provisional Constants.*A B C  
-02560 +00009 +1982D E F  
-00035 -02556 -2246 $Mag.=17.8-1.09\sqrt{d}$ 

No.	d	x	y
251	30	1.590	0.972
252	31	1.965	0.995
253	9	3.723	0.292
254	19	6.461	0.802
255	14	10.856	0.316
256	20	21.636	0.554
257*	107	4.074	1.958
258	11	9.260	1.494
259	29	9.596	1.122
260	28	11.774	1.185
261	13	16.228	1.482
262	20	20.688	1.264
263*	46	21.126	1.130
264	21	24.880	1.380
265*	68	15.092	2.183
266	11	15.646	2.108
267	14	18.300	2.070
268	10	23.190	2.436
269	58	6.560	3.490
270	12	8.259	3.829
271	17	11.120	3.250
272*	63	13.388	3.338
273	21	13.625	3.514
274*	90	19.560	3.510
275	11	19.778	3.979
276	15	19.914	3.628
277*	98	21.142	3.756
278	10	0.650	4.967
279*	58	1.374	4.428
280	35	5.329	4.560
281*	50	12.966	4.500
282	13	17.512	4.710
283	9	1.700	5.856
284	10	15.810	5.190
285	20	22.204	5.029
286	19	0.577	6.110
287	11	1.658	6.740
288	13	3.180	6.120
289	28	3.786	6.224
290	13	5.068	6.840

291	9	8.241	6.609
292*	59	8.532	6.254
293	37	9.286	6.478
294*	77	11.430	6.045
295	11	15.379	6.234
296	26	1.100	7.030
297	29	2.147	7.006
298	12	2.486	7.128
299	8	13.538	7.189
300	8	17.299	7.380
301	11	17.758	7.005
302	39	0.378	8.275
303	10	4.894	8.248
304	12	6.118	8.207
305	24	6.934	8.934
306	20	7.246	8.062
307	22	8.057	8.036
308	14	9.671	8.681
309	51	1.582	9.684
310	12	17.230	9.920
311	34	18.485	9.610
312	12	21.879	9.458
313	17	25.910	9.888
314	32	0.470	10.508
315	10	10.135	10.220
316	11	10.394	10.410
317*	59	11.245	10.222
318	33	13.165	10.851
319	29	13.558	10.828
320	19	19.132	10.360
321	9	21.939	10.208
322	8	24.162	10.190
323	9	3.200	11.339
324	11	6.106	11.437
325	10	10.550	11.918
326	13	10.993	11.919
327	41	12.035	11.962
328	18	12.767	11.656
329	44	13.890	11.944
330	13	14.721	11.522
331	8	16.334	11.202
332	18	22.260	11.690
333	10	23.808	11.402
334	26	24.108	11.060
335	23	24.406	11.114
336	15	25.588	11.278
337*	46	2.834	12.440
338	19	2.940	12.807
339	14	3.359	12.113
340	16	3.859	12.595
341	20	4.740	12.464
342	49	5.374	12.658
343*	51	5.630	12.320
344	40	6.275	12.588
345	12	7.830	12.732
346	15	14.347	12.508
347	28	19.057	12.386
348	19	23.056	12.278
349	9	1.360	13.669
350*	54	4.910	13.512
351	23	5.323	13.362
352	9	6.010	13.496
353	12	9.278	13.683
354	11	11.778	13.436
355	12	14.465	13.130
356	12	17.440	13.158
357	11	21.910	13.528
358	18	8.894	14.258
359	31	10.370	14.452
360	16	13.764	14.976
361	16	14.346	14.662
362	26	22.710	14.668



363	9	8.942	15.756	435	11	6.100	24.596	487	8	20.826	4.674	559	11	18.634	15.132	631	22	9.250	24.081
364	11	9.078	15.720	436	30	8.710	24.110	488	13	21.479	4.159	560	16	11.798	16.244	632	23	11.160	24.634
365	11	10.170	15.619	437	43	14.994	24.864	489	24	24.922	4.572	561*	60	14.391	16.827	633	11	11.454	24.315
366	13	10.782	15.189	438	10	15.965	24.928	490*	47	4.963	5.180	562	24	14.408	16.834	634	13	12.942	24.155
367	9	11.958	15.300	439	15	16.020	24.852	491	10	8.730	5.662	563	34	3.120	17.774	635	25	13.110	24.021
368	28	15.506	15.662	440	13	21.684	24.680	492*	75	9.860	5.105	564	34	4.814	17.638	636	13	15.092	24.062
369	10	17.534	15.605	441	9	2.326	25.749	493	16	13.705	5.690	565	8	6.452	17.688	637	33	18.199	24.322
370	27	4.040	16.480	442	24	2.790	25.575	494	37	14.566	5.112	566*	72	8.388	17.750	638	36	18.503	24.776
371	23	6.197	16.745	443	19	5.559	25.846	495	28	18.018	5.459	567	30	11.068	17.586	639	38	18.798	24.749
372	12	10.036	16.661	444	11	7.080	25.296	496	22	18.982	5.124	568	25	14.349	17.490	640	32	19.100	24.794
373	8	12.726	16.784	445	12	12.568	25.600	497*	45	19.330	5.470	569	33	14.432	17.468	641	34	19.234	24.306
374	8	14.245	16.055	446	26	18.456	25.388	498	9	22.516	5.752	570*	36	17.080	17.672	642	19	19.610	24.346
375	49	15.590	16.084					499	14	23.428	5.152	571	23	19.420	17.926	643	38	20.574	24.590
376	10	7.633	17.175					500*	48	24.402	5.196	572	31	21.900	17.620	644	8	21.452	24.366
377	10	12.572	17.061					501	10	5.655	6.100	573	31	0.562	18.202	645	15	23.648	24.102
378	8	12.886	17.486					502	13	7.346	6.174	574	21	0.674	18.722	646	10	9.858	25.164
379	13	24.354	17.918					503	26	13.764	6.975	575	15	2.332	18.032	647	20	9.895	25.065
380	8	24.814	17.997					504	8	18.687	6.758	576	12	2.798	18.100	648	14	18.797	25.808
381	37	25.146	17.674					505	42	19.606	6.085	577	10	3.106	18.280	649	34	24.528	25.173
382	21	1.498	18.000					506	12	21.122	6.495	578	38	3.915	18.754				
383	11	2.700	18.547					507	11	24.127	6.488	579	8	17.665	18.494				
384	11	4.033	18.262					508	9	7.098	7.705	580	14	24.634	18.037				
385*	114	6.140	18.167					509	10	12.435	7.550	581	9	24.869	18.400				
386*	49	9.541	18.308					510	38	16.888	7.342	582	25	25.500	18.350				
387	14	14.715	18.459					511	9	18.200	7.891	583	12	8.336	19.764				
388	9	14.760	18.433					512	24	18.364	7.528	584	36	12.266	19.085				
389	10	15.740	18.816					513	8	18.654	7.762	585	8	13.600	19.966				
390	27	22.582	18.061					514	17	25.706	7.256	586	32	14.662	19.420				
391	18	22.686	18.583					515	38	8.864	8.974	587	40	18.988	19.870				
392	10	25.124	18.186					516	15	16.885	8.592	588	17	19.706	19.687				
393	37	25.925	18.668					517	12	22.463	8.996	589	10	1.294	20.980				
394	14	2.580	19.168					518	24	22.836	8.869	590	10	1.817	20.652				
395	14	6.219	19.861					519	22	3.752	9.976	591	26	7.718	20.821				
396	23	8.606	19.416					520	25	4.106	9.076	592	10	8.484	20.481				
397*	106	14.167	19.550					521	12	15.656	9.960	593	41	10.286	20.010				
398	9	17.186	19.776					522	8	19.310	9.309	594	15	10.790	20.630				
399	11	19.406	19.970					523	29	22.310	9.312	595	8	15.284	20.170				
400	24	20.910	19.271					524	38	9.507	10.748	596	13	15.880	20.054				
401*	65	5.628	20.130					525	26	24.074	10.575	597	36	17.248	20.124				
402	13	10.283	20.144					526	11	25.990	10.901	598	8	18.140	20.285				
403	10	12.280	20.581					527	25	0.132	11.836	599	9	18.885	20.812				
404	8	12.509	20.458					528	9	1.677	11.523	600	8	9.555	21.415				
405	9	19.275	20.134					529	28	1.970	11.172	601	22	9.965	21.409				
406	11	23.264	20.846					530	24	2.270	11.225	602	17	10.824	21.182				
407	10	23.796	20.536					531	19	3.456	11.371	603	9	11.950	21.086				
408*	56	0.652	21.302					532	37	3.898	11.735	604	14	13.127	21.900				
409	11	6.254	21.166					533*	47	12.573	11.738	605	10	18.022	21.605				
410	12	6.742	21.331					534	11	13.006	11.712	606	14	20.294	21.144				
411	18	6.760	21.330					535	22	14.161	11.292	607	22	20.796	21.718				
412	15	8.428	21.034					536	24	23.046	11.895	608	22	20.829	21.709				
413	23	16.770	21.523					537	27	0.940	12.412	609	22	24.042	21.751				
414	23	22.852	21.892					538	27	4.722	12.758	610	29	0.900	22.027				
415	24	1.580	22.768					539	21	9.990	12.352	611	37	2.315	22.584				
416	27	9.941	22.626					540	10	10.815	12.086	612	16	3.918	22.624				
417	39	13.538	22.908					541*	68	12.269	12.800	613	26	4.130	22.534				
418	23	13.711	22.450					542	14	14.605	12.264	614	31	8.253	22.672				
419	29	13.904	22.980					543	27	23.372	12.746	615	26	9.014	22.155				
420	14	14.155	22.824					544	21	23.842	12.552	616*	41	20.388	22.676				
421	13	14.410	22.629					545	28	25.066	12.930	617	8	23.944	22.888				
422	19	19.533	22.296					546	9	4.525	12.458	618	18	23.944	22.063				
423	10	21.044	22.660					547	28	7.044	12.040	619	8	23.986	22.845				
424	31	24.260	22.472					548	11	14.684	12.622	620	8	24.484	22.060				
425	12	25.860	22.542					549	8	16.880	12.193	621	11	1.018	23.892				
426*	72	10.940	23.591					550	27	23.555	13.203	622	11	1.316	23.739				
427	10	11.558	23.620					551	31	0.633	14.808	623	11	5.895	23.680				
428	8	12.062	23.388					552	12	10.860	14.390	624	14	15.375	23.854				
429*	59	17.510	23.166					553	19	14.828	14.131	625	8	16.888	23.116				
430	21	21.758	23.117					554	25	15.081	14.527	626	8	17.204	23.555				
431	12	22.941	23.756					555	8	19.716	14.250	627	8	17.236	23.592				
432	9	23.239	23.611					556	9	23.166	14.820	628	8	19.910	23.726				
433	10	4.035	24.194					557*	76	16.535	15.383	629	36	25.658	23.230				
434	9	5.270	24.382					558	8	17.710	15.364	630	25	8.536	24.650				

R.A. 0<sup>h</sup> 20<sup>m</sup>

Plate 857; 1916 Nov. 28.

Provisional Constants.

A	B	C
-02605	+00582	+1438

D	E	F
-00608	-02575	-0922

Mag.=16.7-1.09√d

No.	d	x	y
451	9	4.320	0.227
452	13	7.806	0.004
453	14	8.730	0.187
454	27	10.442	0.728
455*	73	13.726	0.571
456	9	14.349	0.939
457	33	16.135	0.522
458	24	19.697	0.266
459	10	24.584	0.992
460	8	1.474	1.608
461	29	2.586	1.482
462	24	5.546	1.466
463	40	11.270	1.391
464	42	15.294	1.574
465	12	17.823	1.290
466	8	23.048	1.748
467	34	24.774	1.506
468	10	0.908	2.574
469	11	5.012	2.012
470	9	5.829	2.617
471	28	10.364	2.618
472	13	12.668	2.898
473*	42	14.546	2.220
474	10	20.773	2.149
475	8	21.854	2.813
476	29	23.402	2.331
477	12	24.980	2.257
478	11	2.594	3.744
479	35	8.892	3.256
480	8	9.774	3.626
481	8	17.294	3.167
482	28	20.405	3.398
483	9	23.678	3.370
484	15	4.826	4.026
485	11	11.180	4.186
486	25	17.516	4.300



680	14	1.298	5.220	752	13	13.106	14.370
681*	42	2.269	5.254	753	24	23.744	14.030
682	32	5.723	5.074	754	12	8.534	15.094
683	19	10.240	5.906	755	18	9.490	15.776
684	24	11.252	5.246	756*	37	12.082	15.294
685	13	16.768	5.857	757	16	14.656	15.688
686	28	19.824	5.709	758	32	5.088	16.370
687	16	2.006	6.544	759	13	8.774	16.038
688	23	4.018	6.319	760	17	16.700	16.351
689	12	5.596	6.575	761	16	19.726	16.512
690	16	7.163	6.294	762	12	19.764	16.752
691	12	7.996	6.954	763	8	20.617	16.425
692	14	9.104	6.618	764	17	21.046	16.246
693	15	12.208	6.638	765*	51	21.222	16.114
694	10	14.539	6.505	766	12	22.402	16.055
695	16	19.324	6.625	767	20	23.863	16.636
696	15	3.598	7.296	768	16	24.521	16.674
697	10	4.782	7.791	769	21	24.812	16.194
698	23	6.068	7.800	770	20	10.528	17.426
699*	36	13.526	7.408	771	16	14.273	17.557
700	22	13.791	7.492	772	16	16.734	17.404
701	28	23.614	7.166	773	8	17.206	17.618
702	20	24.968	7.964	774*	36	23.032	17.064
703	21	0.742	8.943	775	30	23.508	17.928
704	19	4.792	8.726	776	18	25.040	17.573
705	12	5.390	8.421	777	16	2.635	18.092
706	28	6.342	8.394	778	19	3.504	18.395
707*	52	11.700	8.500	779	16	8.172	18.424
708*	37	12.955	8.556	780	15	9.865	18.402
709*	36	14.756	8.550	781	11	17.086	18.557
710	10	15.264	8.924	782	15	18.352	18.652
711	16	16.734	8.030	783	22	19.480	18.588
712	12	16.949	8.478	784*	39	4.439	19.480
713	17	18.548	8.084	785	20	20.164	19.719
714	16	21.032	8.864	786	14	4.760	20.948
715	23	0.220	9.388	787	14	7.465	20.071
716	12	0.372	9.067	788*	37	8.152	20.740
717	16	5.256	9.260	789	12	21.318	20.629
718	10	8.690	9.110	790	24	21.468	20.894
719*	57	10.299	9.820	791	16	2.084	21.814
720*	37	19.310	9.561	792*	52	5.294	21.174
721	23	20.826	9.292	793	11	15.989	21.206
722	21	2.000	10.634	794	36	21.206	21.493
723	14	3.920	10.942	795	24	25.478	21.504
724	18	10.340	10.460	796	14	1.990	22.124
725	17	11.128	10.806	797	13	4.835	22.804
726	8	17.910	10.370	798	16	6.214	22.401
727	19	18.108	10.378	799	11	13.046	22.280
728	20	0.984	11.965	800	19	15.274	22.827
729	14	7.935	11.317	801*	37	16.925	22.774
730	21	15.136	11.540	802	32	25.798	22.787
731	17	18.880	11.216	803	36	3.715	23.275
732	8	20.294	11.500	804	16	6.620	23.755
733	21	1.318	12.814	805	22	8.832	23.163
734	18	1.786	12.615	806	17	10.982	23.994
735	21	3.015	12.979	807	14	19.195	23.894
736	22	5.458	12.370	808	15	1.716	24.163
737	16	11.701	12.264	809*	38	13.838	24.726
738*	56	19.258	12.138	810	16	13.871	24.670
739	16	1.508	13.270	811	26	24.420	24.254
740	25	7.269	13.801	812	36	2.608	25.225
741	18	11.412	13.956	813	14	8.966	25.384
742*	41	19.336	13.764	814	21	15.064	25.634
743	12	1.134	14.890	815	76	25.054	25.486
744	20	5.955	14.528				
745*	59	6.294	14.528				
746	36	6.350	14.898				
747	34	9.531	14.258				
748	23	10.911	14.078				
749	19	10.939	14.380				
750	10	11.126	14.856				
751	16	12.199	14.544				

R.A. 0<sup>h</sup> 36<sup>m</sup>

Plate 889 ; 1916 Dec. 14.

Provisional Constants.

A	B	C
-02540	+00292	+2205

D	E	F
-00267	-02576	-1185

Mag. = 16.7 - 1.09√d

No.	d	x	y
851	11	0.093	0.396
852	8	8.626	0.124
853	18	16.746	0.533
854	9	23.300	0.306
855*	35	23.535	0.828
856	8	3.308	1.500
857	10	5.610	1.810
858	22	23.700	1.403
859*	37	10.641	2.490
860	10	12.099	2.925
861	8	12.500	2.117
862	24	20.685	2.016
863	10	20.746	2.747
864	16	21.218	2.379
865	12	24.086	2.089
866	8	6.700	3.321
867*	40	10.046	3.298
868	37	12.220	3.558
869	8	23.961	3.926
870*	60	1.004	4.948
871	34	3.549	4.636
872	16	5.800	4.368
873	8	6.065	4.774
874	9	8.350	4.529
875	12	13.000	4.761
876	11	14.424	4.914
877	10	14.608	4.632
878*	46	16.026	4.196
879	8	7.475	5.985
880	14	9.455	5.606
881*	51	11.920	5.928
882	9	14.066	5.153
883	12	14.348	5.021
884	36	25.858	5.972
885	9	23.526	6.406
886	16	1.424	7.324
887	8	3.972	7.085
888*	140	20.059	7.081
889	15	2.784	8.104
890	9	11.409	8.864
891	12	11.745	8.746
892	8	16.456	8.628
893	22	21.847	8.994
894	9	7.316	9.394
895	10	7.812	9.020
896	13	13.810	9.023
897	13	18.360	9.153
898	10	20.144	9.628
899	10	5.812	10.554
900	13	19.296	10.764
901	40	19.663	10.288
902	8	12.656	11.142
903	15	15.320	11.190
904	8	16.771	11.528
905	10	4.952	12.004

906*	49	6.825	12.982	978	10	7.940	22.320
907	10	7.260	12.520	979	8	15.575	22.203
908	13	19.674	12.200	980	8	19.302	22.020
909	10	22.646	12.568	981*	58	24.000	22.412
910	36	22.870	12.271	982	21	4.080	23.666
911	40	10.519	13.670	983	9	5.333	23.153
912	17	15.040	13.311	984	36	5.396	23.042
913	8	18.194	13.741	985	10	10.320	23.107
914	26	22.004	13.383	986	10	10.805	23.851
915	24	22.556	13.662	987	34	14.176	23.940
916	20	1.618	14.186	988	8	16.160	23.200
917	24	8.532	14.908	989	10	16.722	23.576
918*	42	17.600	14.438	990	17	21.972	23.638
919	22	17.718	14.060	991	24	2.387	24.403
920	11	3.910	15.479	992	8	7.444	24.378
921	10	5.436	15.578	993	12	13.356	24.132
922	17	12.321	15.340	994	8	17.766	24.152
923	10	14.634	15.284	995	12	23.815	24.300
924	12	18.784	15.848	996	71	3.022	25.628
925	14	24.265	15.587	997	10	3.116	25.801
926	10	24.726	15.866	998	34	5.366	25.666
927	9	0.296	16.224	999	11	11.894	25.596
928	11	1.760	16.788	1000	16	15.310	25.333
929	11	2.416	16.824	1001	8	25.575	25.276
930	17	2.704	16.338				
931	9	4.058	16.812				
932	8	10.733	16.302				
933	10	14.200	16.826				
934	32	14.770	16.743				
935*	40	0.928	17.226				
936	15	2.944	17.714				
937*	55	6.975	17.434				
938	11	9.603	17.830				
939	10	11.874	17.274				
940	20	12.422	17.226				
941	40	19.374	17.178				
942	9	20.360	17.221				
943	10	24.306	17.808				
944	29	1.414	18.087				
945	23	6.164	18.406				
946	10	6.165	18.913				
947	35	8.276	18.971				
948	10	19.047	18.200				
949	8	20.319	18.939				
950	9	21.030	18.390				
951	9	21.522	18.060				
952	12	22.096	18.210				
953	24	22.562	18.524				
954	14	22.904	18.354				
955	8	24.278	18.258				
956	8	2.202	19.350				
957	8	4.464	19.322				
958	10	9.808	19.705				
959	10	13.952	19.544				
960*	55	17.772	19.752				
961	8	21.320	19.802				
962	8	9.104	20.027				
963	15	10.755	20.594				
964	8	20.485	20.034				
965	11	22.480	20.298				
966	32	25.560	20.502				
967	18	3.418	21.642				
968	10	4.048	21.250				
969	11	11.210	21.851				
970	32	11.690	21.216				
971	15	14.014	21.308				
972	14	14.970	21.362				
973	46	18.636	21.055				
974	8	25.572	21.014				
975	24	3.751	22.923				
976	10	6.710	22.184				
977	8	7.549	22.048				

<b>R.A. 0<sup>h</sup> 44<sup>m</sup></b>			
Plate 885 ; 1916 Dec. 13.			
<i>Provisional Constants.</i>			
A	B	C	
−.02555	+0.1127	+.2182	
D	E	F	
−.01156	−.02542	−.0529	
<i>Mag.</i> = 15.9 − 1.09√ <i>d</i>			
No.	<i>d</i>	<i>x</i>	<i>y</i>
1051	10	1.042	0.434
1052*	31	1.280	0.949
1053	20	7.451	0.332
1054	11	10.036	0.484
1055	13	13.298	0.531
1056	8	15.190	0.787
1057	8	20.802	0.471
1058	18	1.459	1.518
1059	25	4.412	1.403
1060*	52	12.207	1.864
1061	9	18.204	1.084
1062	25	23.068	1.208
1063	18	23.330	1.757
1064	14	1.860	2.196
1065	9	15.266	2.563
1066	13	16.493	2.510
1067	15	23.608	2.168
1068*	58	24.504	2.966
1069	8	3.534	3.204
1070	8	15.524	3.746
1071	8	15.527	3.195



1072	9	1.768	4.038	1144	20	18.584	14.314	1216	10	3.877	25.488	1293	11	16.403	7.785	1365	17	19.790	21.895
1073	9	9.599	4.038	1145	19	2.297	15.687	1217	14	4.381	25.190	1294*	52	17.854	7.145	1366	11	19.941	21.638
1074	29	9.886	4.436	1146	12	2.767	15.958	1218	11	9.416	25.820	1295	23	18.834	7.634	1367	17	23.102	21.846
1075	15	13.986	4.567	1147	8	5.306	15.546	1219	12	9.555	25.706	1296*	65	21.372	7.786	1368	36	25.009	21.226
1076	15	18.228	4.228	1148*	28	15.012	15.050	1220	11	14.586	25.322	1297	15	7.366	8.242	1369	28	1.924	22.876
1077	23	18.382	4.570	1149	16	20.740	15.939	1221	24	15.766	25.814	1298	15	11.676	8.854	1370	14	3.520	22.806
1078	25	21.374	4.186	1150	11	14.634	16.044					1299	12	11.770	8.075	1371	30	3.730	22.714
1079	15	23.474	4.100	1151	10	18.712	16.154					1300	10	19.897	8.474	1372	43	4.536	22.733
1080	8	12.034	5.776	1152	12	19.634	16.224					1301*	85	23.250	8.446	1373	25	13.520	22.246
1081	18	18.970	5.342	1153	12	2.386	17.908					1302	24	2.400	9.487	1374*	40	13.662	22.638
1082	17	22.312	5.277	1154	8	2.834	17.184					1303	10	15.538	9.518	1375	26	16.670	22.050
1083	27	25.786	5.296	1155*	34	7.573	17.892					1304	12	15.565	9.057	1376*	82	18.886	22.594
1084	8	1.383	6.524	1156	10	10.634	17.290					1305	17	24.750	9.010	1377	12	24.164	22.968
1085	8	1.430	6.056	1157	12	13.483	17.602					1306	9	25.917	9.768	1378	14	24.750	22.570
1086*	30	3.704	6.040	1158	13	14.378	17.769					1307	10	3.954	10.156	1379	15	2.306	23.715
1087	16	10.201	6.508	1159	10	16.761	17.358					1308	21	8.630	10.367	1380	20	4.872	23.822
1088	24	11.353	6.310	1160	9	23.362	17.732					1309	15	8.894	10.450	1381	10	9.011	23.760
1089	19	12.466	6.564	1161	8	24.420	17.382					1310	13	9.016	10.829	1382*	86	22.798	23.300
1090	8	14.517	6.230	1162	12	0.182	18.354					1311	21	19.250	10.582	1383	22	0.979	24.400
1091	15	18.580	6.916	1163	17	0.654	18.656					1312	16	5.785	11.249	1384	31	7.219	24.283
1092	8	18.606	6.800	1164	11	0.994	18.480					1313	10	13.173	11.708	1385	10	7.252	24.854
1093	9	7.096	7.768	1165	8	2.367	18.360					1314	19	7.050	12.233	1386	23	8.813	24.254
1094*	66	9.480	7.936	1166	9	5.348	18.100					1315	15	11.540	12.180	1387*	80	11.894	24.026
1095	10	10.990	7.696	1167	12	8.974	18.874					1316	14	12.940	12.498	1388	11	20.307	24.752
1096	24	15.051	7.801	1168	8	11.616	18.877					1317	38	19.602	12.414	1389	13	23.640	24.832
1097	10	15.456	7.538	1169	17	11.940	18.212					1318*	70	1.446	13.980	1390	9	13.815	25.800
1098	13	21.070	7.178	1170*	30	13.918	18.948					1319*	73	9.900	13.368	1391	17	18.908	25.948
1099	9	25.118	7.191	1171	8	14.018	18.928					1320	15	14.082	13.965	1392	11	23.920	25.216
1100	9	2.940	8.067	1172	21	20.100	18.212					1321*	52	18.276	13.116				
1101	20	6.121	8.678	1173*	29	23.234	18.854					1322	21	19.418	13.960				
1102	8	6.279	8.251	1174	8	25.740	18.068					1323	30	22.526	13.118				
1103	8	10.203	8.943	1175	15	7.536	19.400					1324	34	14.316	14.383				
1104	8	15.488	8.898	1176	23	10.886	19.995					1325	12	24.958	14.486				
1105*	28	6.560	9.470	1177	19	16.562	19.098					1326	13	3.115	15.008				
1106	9	10.829	9.831	1178	13	17.079	19.721					1327	10	3.810	15.522				
1107	8	15.198	9.200	1179	12	17.588	19.787					1328	21	6.132	15.606				
1108	10	16.138	9.596	1180	26	18.020	19.877					1329	32	7.044	15.335				
1109	8	22.134	9.114	1181	21	20.404	19.409					1330	11	10.750	15.742				
1110	13	24.546	9.299	1182	8	21.927	19.402					1331	18	18.266	15.340				
1111*	34	7.138	10.736	1183	12	0.607	20.432					1332	20	19.210	15.802				
1112	8	10.274	10.242	1184	26	3.692	20.578					1333	22	24.933	15.408				
1113	8	20.006	10.724	1185	8	7.566	20.344					1334*	58	10.125	16.079				
1114	11	7.754	11.038	1186	16	10.553	20.344					1335	11	12.031	16.098				
1115	14	9.255	11.209	1187	21	13.999	20.046					1336	11	14.447	16.886				
1116	11	12.398	11.931	1188	20	16.562	20.748					1337	41	18.859	16.518				
1117	9	13.648	11.634	1189	11	3.716	21.086					1338	25	23.372	16.120				
1118	8	23.552	11.302	1190	12	12.700	21.816					1339*	66	24.607	16.872				
1119	10	0.622	12.702	1191	16	13.204	21.563					1340	14	1.264	17.928				
1120	8	0.660	12.180	1192	8	15.642	21.326					1341	10	2.320	17.574				
1121	28	0.838	12.400	1193	15	25.518	21.412					1342	39	12.096	17.230				
1122	8	3.944	12.284	1194*	46	2.164	22.517					1343	12	21.942	17.640				
1123	14	9.550	12.136	1195	11	7.706	22.880					1344	11	4.988	18.874				
1124	12	12.762	12.800	1196	8	13.402	22.186					1345	20	8.546	18.425				
1125	10	16.543	12.687	1197	8	14.408	22.960					1346	18	9.354	18.942				
1126	8	17.797	12.607	1198	15	23.988	22.682					1347	14	12.786	18.359				
1127	8	21.104	12.444	1199	8	25.583	22.622					1348*	98	14.960	18.786				
1128	19	0.553	13.798	1200	15	25.796	22.531					1349	9	15.586	18.192				
1129	9	3.820	13.736	1201	14	0.169	23.782					1350	24	16.540	18.122				
1130	24	7.277	13.363	1202	9	4.184	23.174					1351	21	23.874	18.219				
1131	24	8.131	13.912	1203*	34	6.869	23.968					1352	24	23.928	18.158				
1132*	40	12.266	13.519	1204	21	10.565	23.816					1353*	44	1.142	19.052				
1133	8	16.874	13.912	1205	13	11.701	23.662					1354	11	8.620	19.932				
1134*	35	17.734	13.018	1206	18	12.598	23.596					1355	14	16.340	19.355				
1135	10	18.160	13.335	1207	24	15.735	23.544					1356	10	24.275	19.090				
1136*	35	20.084	13.032	1208	8	15.784	23.898					1357	11	8.900	20.536				
1137*	41	23.574	13.782	1209*	47	21.679	23.702					1358	13	20.380	20.166				
1138	22	5.958	14.787	1210	12	24.364	23.527					1359	25	3.447	21.598				
1139	12	9.610	14.319	1211	12	2.022	24.408					1360	10	5.784	21.233				
1140	15	10.570	14.256	1212	10	10.710	24.938					1361	11	8.638	21.116				
1141	9	11.576	14.804	1213	9	15.157	24.332					1362	8	11.657	21.481				
1142*	33	11.742	14.931	1214	19	23.032	24.198					1363	32	15.005	21.386				
1143	10	15.927	14.052	1215	10	3.804	25.345					1364	9	18.837	21.178				

**R.A. 0<sup>h</sup> 52<sup>m</sup>**

Plate 895; 1916 Dec. 15.

*Provisional Constants.*

A	B	C
-0.2538	+0.0614	+2.730
D	E	F
-0.0619	-0.2550	-1.176

$Mag. = 17.8 - 1.09\sqrt{d}$

No.	d	x	y
1251	15	6.010	0.453
1252*	86	7.757	0.644
1253	16	15.488	0.745
1254	8	15.707	0.830
1255	43	0.872	1.407
1256	9	1.070	1.432
1257			



1421	8	7.668	3.331	1493	15	21.903	13.186	1565	22	16.724	24.786	1639	13	2.209	7.267	1711	11	10.140	18.550
1422	10	10.455	3.891	1494	9	22.178	13.566	1566	10	1.764	25.166	1640	15	6.334	7.754	1712	30	14.400	18.971
1423	33	15.905	3.570	1495	13	2.756	14.434	1567	22	4.850	25.870	1641	16	7.646	7.867	1713	10	14.430	18.402
1424	9	3.854	4.134	1496	10	10.292	14.525	1568	8	12.364	25.190	1642	25	22.680	7.358	1714	22	15.738	18.135
1425	11	6.250	4.926	1497	8	12.188	14.406	1569	17	12.582	25.826	1643	26	22.882	7.372	1715	16	16.006	18.506
1426	11	10.374	4.869	1498	18	12.688	14.652	1570	15	13.649	25.651	1644	14	25.392	7.295	1716	34	20.561	18.600
1427	30	12.750	4.642	1499	9	17.094	14.610	1571	36	14.942	25.326	1645	34	2.895	8.168	1717	17	24.968	18.050
1428	8	12.788	4.807	1500	23	23.632	14.080	1572*	45	16.050	25.528	1646	16	7.114	8.712	1718*	44	25.314	18.854
1429	33	13.022	4.908	1501	23	2.734	15.354	1573	15	19.102	25.536	1647	11	11.969	8.948	1719	24	5.132	19.614
1430	13	16.628	4.830	1502	13	8.247	15.800	1574	10	19.214	25.593	1648*	50	18.846	8.954	1720	21	14.792	19.290
1431	22	17.320	4.306	1503	11	9.075	15.694					1649	18	19.036	8.451	1721	44	25.256	19.374
1432	10	18.201	4.546	1504*	31	10.724	15.497					1650*	54	23.605	8.624	1722*	56	0.690	20.677
1433	26	22.374	4.038	1505	8	12.554	15.338					1651	20	13.276	9.342	1723	9	2.433	20.034
1434	25	4.070	5.497	1506	25	14.450	15.369					1652	14	15.162	9.816	1724	15	2.705	20.123
1435	12	8.558	5.766	1507	16	15.112	15.652					1653	16	15.399	9.641	1725	14	7.793	20.816
1436	18	20.525	5.393	1508	23	1.175	16.073					1654	15	20.051	9.506	1726	14	10.574	20.707
1437	12	1.485	6.836	1509*	42	2.406	16.821					1655	34	2.786	10.552	1727*	36	14.645	20.500
1438	22	7.728	6.422	1510	22	5.124	16.320					1656	15	15.144	10.648	1728	28	19.386	20.863
1439	8	9.615	6.967	1511	22	14.798	16.092					1657	21	17.240	10.346	1729	12	21.530	20.760
1440	35	11.314	6.754	1512	19	15.420	16.716					1658	12	1.097	11.914	1730	36	24.898	20.250
1441*	34	12.150	6.365	1513*	44	16.415	16.759					1659	16	3.167	11.500	1731	16	4.322	21.840
1442	10	17.500	6.786	1514	13	8.086	17.608					1660	10	5.590	11.925	1732	12	11.954	21.788
1443	11	3.150	7.872	1515	16	22.650	17.908					1661	21	7.632	11.307	1733	11	18.052	21.726
1444	12	4.924	7.992	1516	19	1.684	18.169					1662	16	15.475	11.124	1734	29	21.094	21.559
1445	8	24.386	7.236	1517	23	1.737	18.108					1663	12	20.679	11.490	1735	10	21.282	21.156
1446*	60	1.016	8.399	1518	20	4.193	18.270					1664*	46	20.782	11.706	1736	21	23.504	21.524
1447	12	2.528	8.958	1519	9	6.142	18.180					1665	34	9.666	12.590	1737	10	4.512	22.940
1448	12	9.266	8.402	1520	28	9.474	18.080					1666	14	17.349	12.734	1738	16	5.845	22.360
1449	8	15.585	8.364	1521	24	13.578	18.583					1667	18	17.462	12.514	1739	13	12.234	22.920
1450	30	25.058	8.150	1522	12	15.414	18.070					1668	16	18.644	12.722	1740	19	13.096	22.336
1451	8	1.169	9.230	1523	17	18.360	18.216					1669	19	20.892	12.289	1741	23	16.262	22.556
1452	21	4.020	9.316	1524	25	21.518	18.394					1670	16	5.327	13.995	1742	15	18.658	22.577
1453	8	5.245	9.634	1525*	40	22.413	18.098					1671	14	8.196	13.570	1743	13	21.625	22.605
1454	8	6.434	9.472	1526	10	1.762	19.316					1672	19	16.372	13.582	1744*	39	2.285	23.077
1455	10	7.926	9.454	1527	10	2.086	19.038					1673	13	16.866	13.639	1745*	38	3.788	23.272
1456	10	10.416	9.364	1528	26	4.910	19.998					1674	28	1.574	14.124	1746	15	11.495	23.512
1457	17	14.250	9.438	1529	28	5.808	19.222					1675	30	5.664	14.266	1747	31	12.530	23.306
1458	32	15.607	9.188	1530	27	7.580	19.700					1676	18	6.102	14.310	1748	20	14.340	23.782
1459	21	17.122	9.034	1531	9	10.544	19.670					1677	36	6.508	14.932	1749	28	16.336	23.154
1460	16	19.281	9.630	1532	8	16.640	19.644					1678	14	9.216	14.591	1750	17	16.597	23.494
1461	.8	3.932	10.316	1533	21	19.992	19.808					1679	15	19.631	14.800	1751	16	17.480	23.808
1462	25	6.085	10.885	1534	17	21.264	19.560					1680	15	20.724	14.384	1752	13	22.976	23.899
1463	10	6.870	10.696	1535*	41	19.972	20.328					1681	16	21.995	14.424	1753	20	25.726	23.434
1464*	41	12.365	10.712	1536*	45	22.636	20.616					1682	34	22.264	14.642	1754	13	9.246	24.480
1465	29	18.515	10.626	1537	10	24.654	20.099					1683	9	22.862	14.277	1755	13	9.534	24.602
1466*	35	20.320	10.292	1538	11	0.928	21.800					1684	12	25.906	14.489	1756	10	13.808	24.816
1467	21	21.625	10.634	1539	31	2.832	21.172					1685	12	25.956	14.194	1757	22	14.035	24.055
1468	32	24.909	10.529	1540	28	4.916	21.674					1686	16	8.786	15.485	1758	22	20.773	24.008
1469	12	6.506	11.534	1541	9	12.031	21.914					1687	15	22.018	15.374	1759	17	25.531	24.105
1470	11	7.575	11.800	1542	16	13.350	21.521					1688	12	0.154	16.686	1760	36	25.639	24.184
1471	29	10.815	11.378	1543	12	13.694	21.852					1689	10	1.887	16.306	1761	8	6.385	25.846
1472	8	13.460	11.955	1544	22	16.926	21.735					1690	15	4.174	16.149	1762	17	8.058	25.465
1473	21	13.766	11.342	1545	8	0.534	22.424					1691*	54	7.814	16.357	1763	39	9.025	25.451
1474	32	14.380	11.897	1546	15	1.994	22.916					1692	10	8.465	16.902	1764	32	10.244	25.068
1475	8	19.664	11.214	1547	16	2.581	22.517					1693	26	11.084	16.257	1765	16	13.431	25.556
1476	8	23.190	11.860	1548	24	4.822	22.530					1694	16	17.468	16.333	1766	11	14.250	25.434
1477	12	25.268	11.482	1549	11	7.122	22.142					1695	16	22.258	16.694	1767	22	17.452	25.478
1478	29	5.346	12.314	1550	15	9.331	22.004					1696*	46	25.175	16.908				
1479	9	5.962	12.562	1551	13	10.470	22.800					1697	40	25.994	16.874				
1480	25	6.896	12.834	1552	8	18.466	22.747					1698	17	0.662	17.970				
1481	29	7.421	12.260	1553*	48	20.650	22.278					1699	14	6.834	17.134				
1482	22	8.425	12.603	1554*	52	0.622	23.256					1700*	36	9.495	17.556				
1483	8	12.005	12.374	1555*	48	4.268	23.553					1701	16	20.621	17.121				
1484	25	21.955	12.500	1556	14	7.866	23.309					1702	24	21.006	17.534				
1485	22	0.314	13.072	1557	22	16.586	23.332					1703	25	23.912	17.743				
1486	8	1.736	13.496	1558*	40	24.186	23.048					1704	12	24.622	17.625				
1487	34	4.308	13.585	1559*	40	25.682	23.262					1705	15	24.644	17.645				
1488*	43	10.450	13.582	1560	10	1.480	24.784					1706	40	0.424	18.164				
1489	34	15.387	13.972	1561	9	3.693	24.844					1707	16	4.836	18.367				
1490	10	16.884	13.500	1562	8	7.400	24.654					1708	16	7.474	18.522				
1491	12	19.902	13.910	1563	10	8.330	24.330					1709	16	7.480	18.188				
1492	13	20.828	13.894	1564	10	12.029	24.208					1710	13	8.218	18.979				

R.A. 1<sup>h</sup> 8<sup>m</sup>

Plate 908; 19



**R.A. 1<sup>h</sup> 16<sup>m</sup>**

Plate 902; 1916 Dec. 16.

*Provisional Constants.*

A	B	C
-0.2558	-0.0344	+0.3028

D	E	F
+0.0347	-0.2577	-0.3308

 $Mag. = 15.7 - 1.09\sqrt{d}$ 

No.	d	x	y
1801	8	0.399	0.037
1802	8	0.702	0.896
1803	8	1.184	0.742
1804	15	4.412	0.372
1805	10	6.216	0.608
1806	20	7.230	0.591
1807	8	10.207	0.175
1808	8	14.554	0.654
1809	24	21.852	0.678
1810	8	0.155	1.494
1811*	43	3.500	1.446
1812	23	3.722	1.701
1813	12	16.545	1.393
1814	13	23.156	1.663
1815	8	7.044	2.046
1816	8	8.367	2.213
1817	10	8.564	2.943
1818	10	9.412	2.134
1819	15	11.284	2.087
1820	14	11.955	2.648
1821*	34	16.798	2.543
1822	8	17.508	2.842
1823	14	18.236	2.491
1824	10	18.272	2.665
1825	8	18.896	2.263
1826	8	21.416	2.124
1827	17	23.946	2.936
1828	8	3.554	3.429
1829	9	22.972	3.683
1830	15	0.440	4.142
1831	8	3.095	4.600
1832	19	4.950	4.740
1833	10	5.434	4.959
1834	17	9.849	4.022
1835	14	18.307	4.042
1836*	23	24.634	4.922
1837	11	25.094	4.412
1838	9	5.311	5.558
1839	10	7.388	5.060
1840*	25	15.014	5.429
1841	19	18.540	5.754
1842	23	19.794	5.500
1843	11	20.636	5.100
1844	12	1.427	6.707
1845	11	2.096	6.897
1846	26	2.498	6.267
1847	8	4.210	6.754
1848	8	5.261	6.540
1849	20	9.624	6.692
1850	11	11.447	6.850
1851	26	17.862	6.969
1852*	51	19.856	6.070
1853	10	21.522	6.468
1854	18	0.502	7.385
1855	19	0.702	7.400

1856	8	2.580	7.650	1928	23	23.478	15.750
1857	9	5.120	7.187	1929	10	25.690	15.623
1858	17	6.191	7.379	1930	11	0.106	16.717
1859	10	8.858	7.536	1931*	35	3.022	16.930
1860	12	16.940	7.412	1932	32	3.839	16.890
1861	9	19.947	7.258	1933	9	6.766	16.523
1862	18	22.930	7.050	1934	11	7.526	16.648
1863*	38	1.427	8.650	1935	10	10.798	16.458
1864	15	5.927	8.763	1936	11	12.544	16.858
1865	8	8.296	8.258	1937	16	13.141	16.621
1866	19	9.034	8.547	1938	11	13.378	16.914
1867	13	13.064	8.712	1939	16	16.968	16.722
1868	19	17.072	8.868	1940*	35	17.340	16.279
1869	8	19.043	8.070	1941	14	18.010	16.850
1870	10	19.262	8.590	1942	11	19.037	16.865
1871	26	12.292	9.902	1943	8	19.535	16.357
1872	12	13.528	9.044	1944	13	20.768	16.234
1873	22	14.786	9.828	1945	10	24.434	16.203
1874	12	17.178	9.305	1946	10	25.804	16.692
1875	12	22.412	9.894	1947	8	0.675	17.295
1876*	33	23.294	9.428	1948	17	1.764	17.764
1877	29	13.178	10.398	1949	10	2.472	17.648
1878	24	23.120	10.494	1950	12	2.498	17.670
1879	13	24.436	10.586	1951	10	4.227	17.184
1880	8	5.539	11.666	1952	12	5.726	17.368
1881	12	7.575	11.888	1953	13	7.800	17.838
1882	12	11.668	11.305	1954	10	15.677	17.926
1883	12	17.874	11.052	1955	23	18.236	17.940
1884	31	19.884	11.371	1956*	34	18.856	17.582
1885*	34	19.938	11.934	1957*	37	21.494	17.263
1886	8	20.329	11.252	1958	12	25.346	17.220
1887	8	0.380	12.633	1959	15	2.822	18.073
1888	8	5.315	12.020	1960*	38	3.167	18.873
1889	8	6.770	12.860	1961	8	4.994	18.551
1890	11	8.946	12.782	1962*	36	15.663	18.082
1891	19	9.674	12.218	1963	8	19.256	18.756
1892	10	11.516	12.452	1964	11	24.550	18.754
1893	9	11.702	12.258	1965	32	3.114	19.394
1894	12	11.786	12.408	1966	9	3.826	19.774
1895	10	12.394	12.964	1967	13	5.488	19.010
1896	15	12.684	12.168	1968*	31	7.130	19.702
1897	10	12.692	12.970	1969	8	8.652	19.507
1898	17	18.234	12.138	1970	15	10.027	19.183
1899	11	19.564	12.936	1971	9	10.906	19.762
1900*	35	20.275	12.380	1972	13	17.178	19.218
1901	8	21.718	12.692	1973*	67	17.482	19.470
1902	13	21.854	12.128	1974	10	18.237	19.182
1903	8	23.645	12.754	1975	17	21.091	19.327
1904	8	24.886	12.364	1976	27	22.630	19.537
1905	11	9.350	13.512	1977	26	2.760	20.271
1906	10	10.054	13.783	1978	8	5.280	20.348
1907	19	10.264	13.460	1979	9	16.837	20.048
1908	20	11.636	13.722	1980	8	21.180	20.712
1909	11	13.538	13.759	1981	10	1.368	21.547
1910	12	16.078	13.212	1982	14	6.822	21.295
1911	30	0.104	14.672	1983	14	9.662	21.972
1912	10	0.700	14.307	1984	10	12.996	21.818
1913	10	3.708	14.244	1985	10	13.432	21.967
1914	11	3.748	14.509	1986	8	23.880	21.846
1915	11	3.800	14.212	1987	8	6.414	22.388
1916	8	12.216	14.911	1988*	50	6.598	22.808
1917	21	19.740	14.100	1989	9	9.994	22.520
1918*	34	4.184	15.583	1990	17	11.136	22.722
1919	22	6.090	15.842	1991	20	13.846	22.410
1920	8	8.822	15.333	1992	19	14.280	22.214
1921	10	8.992	15.330	1993	18	20.046	22.644
1922	8	12.169	15.960	1994	8	0.850	23.927
1923	10	12.860	15.708	1995	15	3.598	23.452
1924	29	13.533	15.302	1996	20	7.196	23.092
1925	15	15.174	15.710	1997	20	12.404	23.412
1926	8	20.204	15.832	1998	13	15.242	23.212
1927	12	20.998	15.910	1999	14	21.430	23.946

2000	16	3.406	24.124	2085	16	22.804	6.764
2001	26	3.516	24.206	2086	36	0.698	7.294
2002	8	7.173	24.898	2087	16	8.378	7.244
2003	35	8.169	24.835	2088*	58	11.081	7.706
2004	8	9.052	24.850	2089	21	11.464	7.838
2005	10	9.122	24.323	2090	36	20.783	7.794
2006	8	10.166	24.206	2091	28	22.976	7.564
2007	33	11.826	24.844	2092	19	12.495	8.826
2008	22	14.326	24.360	2093	23	14.356	8.258
2009	8	16.576	24.768	2094*	46	1.105	9.663
2010*	38	22.454	24.806	2095	16	6.745	9.435
2011	9	14.806	25.704	2096	33	6.849	9.806
2012	39	16.938	25.306	2097	23	12.202	9.313
2013	40	20.065	25.476	2098	17	16.716	9.706

**R.A. 1<sup>h</sup> 24<sup>m</sup>**

Plate 887; 1916 Dec. 13.

*Provisional Constants.*

A	B	C
-0.2544	+0.0382	+0.2046

D	E	F
-0.0367	-0.2561	-0.172

 $Mag. = 16.9 - 1.09\sqrt{d}$ 

No.	d	x	y
2051*	37	6.298	0.530
2052	16	12.071	0.586
2053	21	0.828	1.900
2054	11	5.523	1.209
2055	19	8.618	1.185
2056	12	9.912	1.434
2057	10	11.125	1.152
2058*	46	17.354	1.888
2059	16	17.380	1.477
2060*	38	18.627	1.174
2061*	36	18.860	1.766
2062	22	22.018	1.596
2063*	78	22.104	1.444
2064	17	4.384	2.342
2065	13	5.454	2.327
2066	28	5.974	2.813
2067	20	17.725	2.423
2068*	39	24.146	2.372
2069	32	1.642	3.161
2070	32	6.336	3.220
2071	37	17.984	3.963
2072*	57	19.686	3.264
2073*	56	21.458	3.428
2074	17	2.816	4.614
2075	16	11.992	4.964
2076	13	12.904	4.975
2077*	38	2.366	5.128
2078	32	12.788	5.856
2079	13	14.400	5.634
2080	18	14.627	5.199
2081	34	20.386	5.928
2082	36	5.708	6.864
2083	18	12.336	6.170
2084*	80	13.172	6.233

2085	16	22.804	6.764
2086	36	0.698	7.294
2087	16	8.378	7.244
2088*	58	11.081	7.706
2089	21	11.464	7.838
2090	36	20.783	7.794
2091	28	22.976	7.564
2092	19	12.495	8.826
2093	23	14.356	8.258
2094*	46	1.105	9.663
2095	16	6.745	9.435
2096	33	6.849	9.806
2097	23	12.202	9.313
2098	17	16.716	9.706
2099	36	23.883	9.599
2100	40	25.238	9.398
2101	36	0.952	10.733
2102	18	2.272	10.798
2103	28	6.032	10.556
2104	34	6.618	10.926
2105	17	5.728	11.356
2106*	46	7.924	11.084
2107*	40	8.684	11.376
2108	16	2.752	12.572
2109	14	9.550	12.413
2110	34	9.945	12.844
2111	30	10.765	12.650
2112	13	11.956	12.936
2113	14	13.534	12.124
2114	30	14.776	12.949
2115	22	17.203	12.464
2116	42	22.136	12.182
2117*	50	4.226	13.627
2118	12	7.356	13.513
2119	14	12.682	13.571
2120	11	13.666	13.218
2121	30	15.106	13.840
2122*	60	22.421	13.533
2123	34	22.454	13.536
2124	46	24.092	13.066
2125	13	6.490	14.836
2126	13	7.756	14.095
2127	23	7.918	14.374
2128	36	17.236	14.664
2129	16	22.566	14.342
2130	36	1.406	15.981
2131	21	10.902	15.345
2132	36	15.860	15.816
2133	37	17.200	15.850
2134	16	19.926	15.074
2135	13	23.372	15.332
2136	37	23.792	15.286
2137	13	2.372	16.416
2138	16	3.754	16.878
2139	16	10.778	16.678
2140	17	11.513	16.914
2141	36	11.560	16.006
2142	11	17.192	16.055
2143*	60	24.784	16.756
2144	22	3.302	17.416
2145	21	13.039	17.134
2146	13	16.648	17.415
2147	26	16.761	17.649
2148	12	22.833	17.328
2149	23	2.536	18.964
2150	24	8.764	18.675
2151	13	11.147	18.468
2152	23	12.323	18.593
2153*	78	20.503	18.886
2154	16	22.634	18.974
2155*	68	23.374	18.345
2156	42	0.630	19.785



2157	16	6.522	19.344
2158	22	10.812	19.128
2159	32	17.231	19.296
2160	16	17.254	19.267
2161*	68	20.734	19.004
2162	17	21.386	19.011
2163	25	6.250	20.774
2164	20	6.724	20.433
2165	16	6.781	20.083
2166	30	7.225	20.278
2167	22	12.161	20.769
2168	15	12.303	20.486
2169	9	20.435	20.434
2170*	76	24.674	20.425
2171	10	11.564	21.553
2172	19	18.345	21.022
2173	23	8.023	22.096
2174	20	8.416	22.494
2175	10	22.372	22.225
2176	32	4.945	23.275
2177	19	6.166	23.196
2178	15	12.463	23.575
2179	19	14.798	23.719
2180	16	3.754	24.582
2181	16	4.664	24.234
2182	32	9.624	24.514
2183	36	21.540	24.336
2184	60	0.554	25.056
2185	18	11.588	25.971
2186	14	14.572	25.872
2187	60	16.245	25.674
2188	17	18.024	25.084
2189	16	21.760	25.694
2190	64	22.714	25.726
2191	32	24.302	25.360

**R.A. 1<sup>h</sup> 32<sup>m</sup>**

Plate 909; 1916 Dec. 17.

*Provisional Constants.*

A B C  
-02560 -00495 +2731

D E F  
+00474 -02580 -3282

*Mag.* = 17.4 - 1.09√*d*

No.	<i>d</i>	<i>x</i>	<i>y</i>
2201	10	1.340	0.415
2202	27	7.141	0.407
2203	30	9.370	0.645
2204	11	10.058	0.980
2205	42	14.268	0.646
2206	12	21.126	0.326
2207	10	0.400	1.424
2208*	103	10.203	1.156
2209	17	11.512	1.942
2210	48	13.865	1.419

2211	11	17.973	1.100
2212*	66	19.598	1.994
2213	11	19.800	1.412
2214	22	20.850	1.481
2215*	96	21.114	1.424
2216*	53	1.954	2.163
2217	14	16.892	2.860
2218	19	17.598	2.562
2219	31	18.030	2.563
2220	15	23.038	2.923
2221	14	25.950	2.975
2222	12	6.100	3.278
2223	54	6.239	3.546
2224	12	15.380	3.673
2225	9	5.940	4.292
2226	13	7.440	4.062
2227	13	12.850	4.383
2228	20	13.344	4.019
2229	37	13.520	4.198
2230	11	15.484	4.326
2231	14	19.158	4.896
2232*	104	19.932	4.279
2233	13	23.314	4.776
2234	11	23.372	4.689
2235	31	25.978	4.993
2236	9	6.182	5.672
2237	24	8.648	5.175
2238	15	8.747	5.831
2239	13	9.004	5.572
2240	11	9.040	5.318
2241*	54	14.584	5.444
2242	13	21.714	5.540
2243	18	22.998	5.393
2244	16	0.622	6.557
2245	28	6.938	6.368
2246	13	8.447	6.866
2247	10	12.332	6.357
2248	10	20.365	6.704
2249	76	25.981	6.584
2250	20	0.800	7.352
2251	11	5.710	7.452
2252*	50	10.536	7.608
2253	50	17.518	7.138
2254	9	19.727	7.250
2255	11	21.022	7.703
2256	10	25.459	7.690
2257	26	14.200	8.926
2258	14	24.514	8.926
2259	17	25.272	8.219
2260	44	1.710	9.386
2261	50	3.062	9.182
2262	14	5.878	9.506
2263	13	3.336	10.734
2264	40	20.880	10.237
2265	14	21.203	10.744
2266	19	4.300	11.035
2267	13	5.344	11.954
2268	11	7.934	11.809
2269	14	9.190	11.750
2270	21	13.391	11.031
2271	22	14.670	11.495
2272	16	20.581	11.486
2273*	48	20.590	11.534
2274	11	25.400	11.044
2275	10	25.694	11.292
2276	9	1.406	12.788
2277	51	1.926	12.853
2278*	55	8.260	12.436
2279	13	11.974	12.475
2280*	51	13.932	12.232
2281	25	15.146	12.738
2282	13	17.853	12.670

2283	9	21.198	12.734
2284	71	0.251	13.326
2285	27	0.290	13.330
2286	10	5.730	13.798
2287	14	8.818	13.458
2288	13	9.894	13.819
2289	11	17.652	13.095
2290	16	20.998	13.475
2291	26	23.100	13.412
2292	14	8.622	14.640
2293	27	11.500	14.610
2294	19	14.802	14.607
2295*	43	18.243	14.840
2296	14	1.216	15.122
2297	42	1.634	15.078
2298	30	5.470	15.757
2299	16	12.200	15.000
2300	12	15.239	15.140
2301	11	15.425	15.765
2302	13	24.186	15.670
2303	30	24.810	15.469
2304*	59	2.622	16.541
2305	19	8.272	16.910
2306	10	12.853	16.572
2307	29	13.980	16.507
2308	14	15.144	16.616
2309*	55	19.686	16.057
2310	42	20.390	16.902
2311	11	0.682	17.125
2312	26	4.924	17.578
2313	14	9.652	17.810
2314	19	20.924	17.100
2315	21	21.386	17.818
2316	23	21.424	17.639
2317	12	0.486	18.767
2318*	75	1.219	18.135
2319	11	11.294	18.873
2320	11	21.625	18.650
2321	17	5.323	19.208
2322	38	14.878	19.610
2323	23	19.510	19.368
2324	8	21.620	19.872
2325*	78	2.526	20.212
2326	12	2.882	20.096
2327	31	6.130	20.612
2328	16	11.350	20.650
2329	11	13.884	20.520
2330	13	23.948	20.445
2331	13	3.115	21.213
2332	15	3.598	21.186
2333	21	4.015	21.979
2334*	55	5.640	21.778
2335	27	12.608	21.829
2336	12	19.005	21.489
2337	41	20.852	21.260
2338	10	7.305	22.320
2339	15	7.593	22.410
2340	12	11.867	22.986
2341*	72	14.000	22.731
2342	19	14.814	22.925
2343	13	16.781	22.294
2344	28	18.339	22.258
2345	13	20.336	22.861
2346	13	20.826	22.994
2347	13	12.035	23.968
2348	16	22.346	23.105
2349	25	22.548	23.685
2350	16	10.800	24.700
2351	33	13.048	24.855
2352	10	15.179	24.854
2353	8	20.431	24.086
2354	62	24.460	24.492

2355	19	24.893	24.573
2356	60	0.586	25.519
2357	30	2.180	25.150
2358	12	8.100	25.970
2359	44	12.126	25.518
2360	39	23.051	25.832

**R.A. 1<sup>h</sup> 40<sup>m</sup>**

Plate 891; 1916 Dec. 14.

*Provisional Constants.*

A B C  
-02563 -00006 +2410

D E F  
+00009 -02580 -2167

*Mag.* = 17.0 - 1.09√*d*

No.	<i>d</i>	<i>x</i>	<i>y</i>
2401	18	12.861	0.594
2402*	45	16.764	0.177
2403*	90	19.744	0.572
2404	13	19.858	0.379
2405	20	25.338	0.331
2406	10	0.538	1.139
2407	33	4.664	1.753
2408	15	21.044	1.025
2409	17	0.790	2.941
2410	21	3.705	2.948
2411	21	3.835	2.077
2412	14	4.715	2.976
2413*	38	8.700	2.057
2414*	38	8.775	2.035
2415	10	12.774	2.600
2416	25	16.089	2.685
2417	9	18.434	2.448
2418*	34	19.592	2.716
2419	13	19.856	2.614
2420	24	24.330	2.835
2421	33	14.322	3.716
2422	9	15.906	3.393
2423	14	21.394	3.348
2424*	46	24.656	3.850
2425	9	1.096	4.790
2426	10	1.154	4.700
2427	32	3.762	4.963
2428*	49	6.730	4.410
2429	30	10.504	4.106
2430	8	11.724	4.555
2431	17	0.786	5.410
2432*	78	5.634	5.389
2433	29	11.715	5.530
2434	21	12.114	5.585
2435	10	14.936	5.022
2436	15	18.748	5.672
2437*	60	3.785	6.554
2438	34	10.790	6.303
2439	12	13.858	6.884
2440	11	21.374	6.028
2441*	57	24.974	6.556
2442	13	6.321	7.654

2443	29	8.026	7.356
2444	30	9.738	7.764
2445	9	13.973	7.068
2446	31	14.064	7.040
2447	27	15.128	7.329
2448	15	15.549	7.962
2449	25	18.462	7.108
2450	9	2.362	8.920
2451	25	3.105	8.195
2452	18	4.124	8.311
2453*	56	5.465	8.166
2454	29	6.204	8.484
2455	29	10.278	8.348
2456	17	13.835	8.630
2457*	44	21.335	8.501
2458	22	23.900	8.052
2459	14	17.072	9.605
2460	9	18.287	9.407
2461	23	5.666	10.514
2462	31	14.900	10.914
2463	9	25.770	10.074
2464	10	3.278	11.018
2465	12	3.578	11.265
2466	9	8.387	11.313
2467*	36	13.045	11.300
2468	19	15.084	11.245
2469	14	16.680	11.050
2470	37	18.819	11.677
2471	10	19.485	11.197
2472	25	20.112	11.212
2473	8	23.398	11.400
2474*	59	24.145	11.050
2475	30	25.902	11.206
2476	25	14.662	12.917
2477	9	21.816	12.814
2478*	69	24.813	12.206
2479	26	1.016	13.426
2480	35	10.296	13.266
2481	22	11.397	13.924
2482	23	14.176	13.447
2483	22	17.924	13.454
2484	29	20.140	13.106
2485	11	22.324	13.760
2486	26	7.617	14.746
2487	30	8.856	14.897
2488	37	11.960	14.478
2489	8	20.868	14.144
2490	35	21.450	14.810
2491*	48	22.892	14.596
2492	10	2.140	15.668
2493	33	2.756	15.454
2494	30	8.384	15.620
2495	18	11.036	15.309
2496	31	14.809	15.004
2497	36	17.750	15.420
2498	12	2.916	16.076
2499	33	8.608	16.947
2500	26	8.634	16.954
2501	10	9.550	16.254
2502	11	13.091	16.898
2503	12	14.180	16.500
2504	13	15.114	16.089
2505	12	18.888	16.480
2506	10	20.482	16.346
2507	11	1.232	17.810
2508	23	6.687	17.184
2509	24	10.702	17.560
2510	18	16.416	17.504
2511	24	19.876	17.272
2512	28	22.138	17.911
2513	8	1.509	18.101
2514	8	2.596	18.382



2515	20	4.308	18.418	2612*	58	24.892	2.660	2684	34	20.414	17.048	2760	22	0.324	1.984	2832	23	4.477	12.639
2516	9	7.287	18.510	2613*	42	1.950	3.937	2685	22	23.118	17.186	2761*	29	6.096	1.292	2833	8	5.664	12.572
2517	10	7.586	18.954	2614	13	9.414	3.524	2686	31	23.499	17.311	2762	21	9.766	1.535	2834	8	6.309	12.920
2518*	39	11.488	18.456	2615	11	18.648	3.310	2687*	49	3.488	18.542	2763	12	15.432	1.496	2835	16	12.583	12.070
2519	18	21.088	18.221	2616	58	25.872	3.180	2688	12	11.992	18.214	2764	12	23.964	1.932	2836	16	16.032	12.796
2520	44	25.908	18.480	2617	24	6.228	4.574	2689*	50	15.718	18.177	2765	16	24.537	1.818	2837	10	25.014	12.552
2521	10	6.540	19.762	2618	31	15.466	4.748	2690	10	17.498	18.551	2766	8	1.102	2.671	2838	43	0.486	13.804
2522	22	15.228	19.334	2619	11	3.045	5.320	2691	24	8.388	19.166	2767*	45	3.118	2.761	2839	17	5.186	13.516
2523	29	17.650	19.088	2620	33	3.426	5.741	2692	29	9.750	19.050	2768	12	5.688	2.925	2840	19	5.965	13.388
2524	10	1.976	20.444	2621	22	12.423	5.716	2693	24	16.791	19.682	2769	10	8.853	2.289	2841	10	8.858	13.157
2525	13	4.948	20.736	2622	11	16.410	5.014	2694	38	18.888	19.610	2770	20	8.950	2.240	2842	12	11.020	13.882
2526*	73	5.319	20.633	2623	31	23.917	5.372	2695	17	20.820	19.046	2771	9	11.098	2.498	2843	9	18.738	13.818
2527	22	7.218	20.552	2624*	60	2.314	6.635	2696*	47	4.554	20.773	2772	17	14.370	2.503	2844*	43	20.902	13.627
2528	41	8.006	20.107	2625	27	15.452	6.198	2697	23	11.642	20.896	2773	10	3.770	3.918	2845	8	23.591	13.780
2529	34	10.540	20.580	2626	14	16.712	6.365	2698	14	16.484	20.052	2774*	42	4.099	3.274	2846	10	0.501	14.576
2530	23	14.809	20.290	2627	26	21.406	6.506	2699	17	20.624	20.526	2775	11	14.594	3.578	2847	19	1.822	14.856
2531	26	21.488	20.286	2628*	54	23.610	6.500	2700*	48	4.692	21.962	2776	11	15.470	3.388	2848	17	2.262	14.960
2532	8	13.862	21.100	2629	46	23.658	6.060	2701*	60	9.036	21.504	2777	12	18.028	3.937	2849	16	4.951	14.010
2533	22	19.795	21.014	2630	20	25.206	6.404	2702*	47	19.670	21.386	2778*	31	19.970	3.645	2850	10	6.528	14.152
2534	11	20.274	21.982	2631	12	25.461	6.248	2703	14	6.726	22.168	2779	9	4.105	4.798	2851	8	9.674	14.590
2535*	66	6.655	22.496	2632	25	12.802	7.400	2704	24	6.964	22.924	2780	20	2.160	5.481	2852	11	9.952	14.326
2536	9	16.406	22.192	2633	38	13.940	7.802	2705	30	10.520	22.954	2781	14	20.908	5.348	2853	8	10.149	14.358
2537	19	0.629	23.705	2634*	45	15.932	7.504	2706	11	14.434	22.498	2782	15	25.253	5.768	2854	26	16.750	14.726
2538	12	5.520	23.376	2635	25	1.278	8.151	2707	17	17.895	22.890	2783	14	25.258	5.800	2855	12	17.332	14.225
2539	10	6.514	23.747	2636	12	3.530	8.787	2708	12	13.689	23.422	2784*	42	1.857	6.612	2856	14	19.484	14.795
2540*	62	9.467	23.082	2637	12	3.626	8.114	2709	33	18.934	23.993	2785	31	1.904	6.173	2857	26	21.124	14.947
2541	32	12.200	23.060	2638	11	7.248	8.770	2710	12	20.234	23.049	2786	18	3.458	6.504	2858	22	2.146	15.032
2542	30	19.324	23.784	2639	41	15.652	8.850	2711	33	22.402	23.275	2787	12	3.711	6.345	2859	9	8.642	15.624
2543	58	2.548	24.484	2640	22	17.980	8.262	2712	12	5.169	24.585	2788	9	5.625	6.960	2860	22	11.286	15.530
2544	14	2.990	24.556	2641	12	22.091	8.750	2713	11	9.516	24.034	2789	8	6.433	6.732	2861	14	12.187	15.140
2545	18	4.584	24.768	2642	24	3.568	9.763	2714*	77	12.830	24.158	2790	22	6.826	6.536	2862	14	14.060	15.526
2546	22	7.840	24.692	2643	12	6.018	9.001	2715	14	19.367	24.532	2791	15	11.562	6.202	2863	14	18.554	15.844
2547	13	19.426	24.684	2644	25	10.037	9.462	2716	32	1.910	25.702	2792	10	11.960	6.735	2864	18	22.691	15.428
2548	37	1.173	25.844	2645	16	20.356	9.279	2717	29	3.810	25.697	2793	20	14.590	6.252	2865	24	22.954	15.384
2549	12	6.640	25.416	2646	14	3.180	10.136	2718	31	4.076	25.910	2794	13	15.966	6.628	2866	12	0.123	16.822
2550	32	17.600	25.530	2647	25	9.062	10.614	2719	16	7.550	25.792	2795	8	18.489	6.394	2867	10	5.168	16.863
2551	30	24.190	25.608	2648	16	13.436	10.001	2720	13	10.234	25.946	2796	17	19.794	6.033	2868	13	6.726	16.578
				2649*	60	1.574	11.145	2721	13	10.935	25.216	2797	10	23.309	6.140	2869	12	8.416	16.810
				2650	33	3.340	11.266	2722	44	14.925	25.030	2798*	42	23.632	6.584	2870	23	11.170	16.886
				2651	14	8.695	11.623					2799	22	5.806	7.852	2871	10	11.964	16.868
				2652	13	10.382	11.526					2800	14	6.666	7.704	2872*	27	17.262	16.912
				2653	19	17.336	11.764					2801*	38	8.156	7.186	2873	12	17.308	16.162
				2654*	65	2.264	12.288					2802	8	9.578	7.674	2874	29	19.646	16.446
				2655	12	2.499	12.083					2803	13	18.862	7.984	2875	21	20.050	16.114
				2656	14	13.332	13.893					2804	10	0.354	8.875	2876	9	22.670	16.161
				2657	20	21.586	13.330					2805	16	5.586	8.469	2877	19	25.252	16.213
				2658*	60	22.144	13.682					2806*	27	11.354	8.878	2878	15	1.439	17.298
				2659*	52	0.391	14.714					2807*	34	13.700	8.030	2879	21	1.818	17.422
				2660	36	3.608	14.896					2808	12	16.389	8.881	2880	12	4.802	17.180
				2661	42	4.166	14.024					2809	14	17.600	8.405	2881	10	5.113	17.783
				2662	20	5.025	14.254					2810	9	23.532	8.760	2882	8	15.016	17.334
				2663	11	5.215	14.596					2811	10	25.341	8.540	2883*	28	22.088	17.098
				2664	11	14.918	14.776					2812	10	3.027	9.707	2884	9	22.622	17.784
				2665	10	22.200	14.455					2813	16	4.730	9.306	2885	10	10.148	18.356
				2666	26	23.516	14.746					2814	20	5.393	9.915	2886	12	12.950	18.824
				2667	26	23.840	14.922					2815	9	8.892	9.804	2887	10	18.184	18.222
				2668	22	23.956	14.854					2816	8	9.430	9.764	2888	10	22.299	18.962
				2669	20	8.309	15.187					2817	13	11.106	9.780	2889	25	4.720	19.537
				2670	31	8.363	15.040					2818	11	20.330	9.172	2890	19	6.644	19.146
				2671	32	14.172	15.683					2819	11	21.656	9.426	2891	16	12.398	19.383
				2672	31	15.602	15.348					2820	20	23.852	9.397	2892	23	12.882	19.930
				2673	34	16.596	15.627					2821	19	5.311	10.388	2893*	40	24.234	19.654
				2674	11	0.536	16.360					2822	20	13.006	10.770	2894	10	24.239	19.708
				2675	12	3.558	16.824					2823	10	16.299	10.078	2895	23	25.602	19.712
				2676	10	4.246	16.112					2824	13	18.551	10.000	2896	1		



2904	8	12.278	21.216	2972	14	11.817	4.259	3044	52	8.500	17.850	3108	32	3.579	1.522	3180	33	7.590	10.206
2905	11	16.684	21.876	2973	70	13.320	4.326	3045	10	16.460	17.308	3109	27	4.214	1.306	3181	22	8.622	10.160
2906	8	16.920	21.472	2974	23	3.060	5.536	3046*	85	20.665	17.524	3110	25	7.200	1.216	3182	35	13.797	10.260
2907	23	25.105	21.063	2975	20	3.068	5.570	3047	10	0.164	18.746	3111	20	9.226	1.286	3183	20	18.768	10.555
2908	10	2.404	22.094	2976	8	24.100	5.343	3048	10	16.780	18.592	3112	27	17.210	1.504	3184	19	21.620	10.348
2909	14	8.683	22.608	2977*	62	1.436	6.362	3049*	65	2.094	19.430	3113	35	24.656	1.224	3185	12	25.052	10.712
2910	10	11.114	22.799	2978	9	12.442	7.410	3050	35	3.466	19.480	3114	44	0.295	2.220	3186	43	25.877	10.866
2911*	45	22.818	22.382	2979	29	15.494	7.297	3051	52	6.068	19.268	3115	20	0.775	2.708	3187	24	0.687	11.778
2912	8	24.618	22.158	2980	12	22.664	7.030	3052*	102	7.702	19.425	3116	22	1.766	2.565	3188	20	7.046	11.626
2913	22	0.770	23.389	2981	12	3.160	8.310	3053	13	9.850	19.300	3117	31	3.521	2.459	3189	26	14.113	11.712
2914	16	8.607	23.913	2982	23	4.013	8.046	3054	15	15.904	19.050	3118	20	7.656	2.158	3190	23	15.950	11.989
2915	8	14.172	23.446	2983*	45	10.270	8.628	3055	25	17.970	19.820	3119	25	10.416	2.663	3191	24	16.314	11.156
2916	10	15.850	23.858	2984	17	13.036	8.992	3056	9	21.505	19.866	3120	24	13.116	2.149	3192	21	16.650	11.130
2917	12	22.184	23.020	2985	11	15.446	8.124	3057	27	2.978	20.832	3121	16	14.476	2.931	3193	10	21.551	11.529
2918	15	6.334	24.793	2986	16	21.780	8.474	3058	13	3.220	20.584	3122	17	14.975	2.316	3194	25	21.817	11.128
2919	8	7.465	24.208	2987	24	1.476	9.173	3059	27	5.357	20.094	3123	12	20.686	2.261	3195	42	23.266	11.224
2920	18	13.506	24.785	2988	31	7.830	9.824	3060	22	19.610	20.000	3124*	60	6.518	3.667	3196	10	5.834	12.614
2921	16	13.682	24.658	2989	11	8.550	9.900	3061	18	23.731	20.635	3125	27	8.607	3.159	3197	24	8.564	12.212
2922	20	17.766	24.066	2990	16	14.952	9.676	3062	9	2.500	21.930	3126	23	11.486	3.385	3198	20	8.860	12.800
2923	16	18.300	24.844	2991	12	18.842	9.314	3063	14	10.947	21.944	3127	35	11.950	3.424	3199	10	10.826	12.738
2924	13	21.803	24.180	2992	24	18.882	9.050	3064	24	12.183	21.010	3128	44	18.430	3.937	3200	26	14.905	12.156
2925	16	11.272	25.658	2993	30	23.139	9.790	3065	9	13.164	21.684	3129	13	5.126	4.542	3201	12	15.296	12.757
2926	14	11.943	25.486	2994	32	4.744	10.168	3066	10	14.658	21.342	3130	38	15.916	4.679	3202	24	15.860	12.422
2927	17	18.904	25.454	2995	24	4.790	10.730	3067*	87	19.556	21.398	3131	12	22.040	4.728	3203	44	19.743	12.556
2928	20	18.910	25.491	2996	35	7.452	10.901	3068	10	0.065	22.800	3132	25	24.652	4.700	3204*	58	20.186	12.759
2929	8	20.584	25.144	2997*	51	10.750	10.399	3069*	76	0.688	22.157	3133	24	1.693	5.403	3205	40	22.440	12.176
2930	11	24.710	25.400	2998	8	13.210	10.182	3070*	60	5.016	22.453	3134*	60	4.742	5.768	3206	43	3.192	13.775
				2999	20	13.660	10.828	3071	10	5.961	22.060	3135	12	8.602	5.414	3207	33	6.310	13.984
				3000*	40	15.190	10.126	3072	11	6.036	22.618	3136*	45	9.585	5.988	3208	12	7.725	13.000
				3001	20	2.213	11.074	3073	10	20.744	22.010	3137	24	10.982	5.967	3209	49	9.103	13.316
				3002	12	3.024	11.584	3074	22	20.808	22.080	3138	22	11.246	5.506	3210	12	9.290	13.354
				3003	10	3.733	11.470	3075*	43	21.515	22.866	3139	22	11.500	5.547	3211	12	11.220	13.656
				3004	21	9.350	11.131	3076	27	24.390	23.591	3140	15	11.884	5.123	3212	22	20.661	13.167
				3005	53	11.900	11.530	3077	10	12.278	24.258	3141	17	12.102	5.626	3213	35	21.366	13.498
				3006	19	16.568	11.764	3078	10	13.790	24.490	3142	11	16.333	5.502	3214	12	23.091	13.915
				3007	12	17.599	11.374	3079*	104	14.418	24.464	3143	41	17.655	5.064	3215	22	24.055	13.566
				3008	9	17.792	11.410	3080*	69	15.562	24.901	3144	23	20.534	5.839	3216	22	24.206	13.866
				3009	12	18.118	11.170	3081	12	18.054	24.829	3145	14	22.979	5.422	3217	15	7.505	14.027
				3010	13	23.018	11.700	3082	22	18.470	24.554	3146	16	3.132	6.332	3218	25	7.608	14.338
				3011	10	2.850	12.322	3083*	72	20.867	24.431	3147	30	11.525	6.465	3219	12	7.709	14.026
				3012	9	9.891	12.552	3084	13	7.974	25.932	3148	12	13.993	6.664	3220	31	10.290	14.141
				3013	11	10.375	12.406					3149	13	19.468	6.306	3221	23	19.966	14.082
				3014	15	14.649	12.802					3150*	51	20.070	6.975	3222	24	25.114	14.423
				3015	10	18.896	12.770					3151*	64	21.764	6.274	3223	23	0.044	15.566
				3016*	52	19.192	12.388					3152	32	0.274	7.108	3224	15	0.674	15.431
				3017	24	19.730	12.370					3153	12	5.937	7.191	3225	35	4.085	15.496
				3018	16	20.370	12.164					3154	10	6.880	7.320	3226	36	4.331	15.545
				3019	41	4.988	13.190					3155	33	7.508	7.916	3227	31	8.496	15.310
				3020	45	11.876	13.580					3156	34	9.241	7.466	3228	13	9.076	15.809
				3021	8	13.285	13.640					3157	27	10.636	7.325	3229	15	11.768	15.102
				3022	11	17.722	13.072					3158	26	15.387	7.122	3230	19	12.756	15.868
				3023	35	25.494	13.730					3159	10	18.178	7.910	3231	24	14.526	15.640
				3024	13	9.976	14.403					3160	40	23.501	7.562	3232	26	18.870	15.359
				3025	9	10.178	14.750					3161	12	23.675	7.522	3233	21	2.972	16.479
				3026	19	11.810	14.953					3162	30	24.122	7.646	3234	15	3.414	16.883
				3027	9	19.482	14.066					3163	13	2.974	8.661	3235	20	3.765	16.813
				3028	11	21.815	14.622					3164	11	3.786	8.364	3236	12	4.786	16.022
				3029	20	0.538	15.208					3165	34	5.384	8.352	3237	14	6.940	16.459
				3030	30	0.800	15.162					3166	13	8.533	8.418	3238	14	7.812	16.592
				3031	22	3.102	15.984					3167*	76	10.074	8.870	3239	44	19.282	16.326
				3032	10	9.660	15.590					3168	10	13.539	8.182	3240	33	21.386	16.778
				3033	31	20.888	15.402					3169	25	14.992	8.407	3241	13	24.570	16.500
				3034	12	22.326	15.481					3170	10	17.152	8.291	3242	24	3.446	17.026
				3035*	63	10.806	16.787					3171*	60	17.503	8.514	3243	40	4.285	17.130
				3036	24	12.482	16.117					3172	20	19.276	8.043	3244	14	5.186	17.530
				3037	17	12.484	16.212					3173	36	0.784	9.866	3245	19	5.862	17.620
				3038	12	12.975	16.896					3174	20	16.306	9.378	3246	13	18.138	17.427
				3039	30	13.048	16.604					3175	41	17.218	9.390	3247	21	20.829	17.385
				3040	29	19.644	16.191					3176	12	18.830	9.654	3248	18	0.499	18.653
				3041	9	20.330	16.846					3177	10	23.010	9.620	3249	20	3.748	18.234
				3042	10	2.319	17.672					3178	17	24.817	9.126	3250	15	5.615	18.666
				3043	32	4.724	17.445					3179	14	6.630	10.826	3251	15	6.438	18.484

R.A. 2<sup>h</sup> 4<sup>m</sup>

Plate 89



3252	16	11-114	18-476
3253	18	17-045	18-732
3254	34	18-355	18-194
3255	13	19-288	18-100
3256	14	19-728	18-599
3257*	60	21-732	18-520
3258	20	24-948	18-530
3259	17	8-057	19-680
3260*	62	10-510	19-419
3261	20	14-146	19-782
3262	44	14-490	19-140
3263	19	15-589	19-096
3264	21	19-583	19-688
3265*	68	20-909	19-594
3266	26	25-040	19-836
3267	37	1-520	20-706
3268	12	10-230	20-404
3269	33	10-749	20-448
3270	40	11-944	20-507
3271*	58	17-527	20-851
3272	34	17-760	20-127
3273	25	21-376	20-340
3274	43	5-790	21-676
3275	20	7-320	21-846
3276	20	7-654	21-515
3277	10	11-843	21-374
3278	24	16-846	21-285
3279	35	20-872	21-264
3280	40	25-655	21-276
3281	17	0-064	22-084
3282	24	0-102	22-784
3283	33	5-570	22-300
3284	19	14-438	22-828
3285	10	20-654	22-112
3286	12	1-680	23-335
3287	43	2-218	23-654
3288	34	4-891	23-512
3289	38	5-408	23-840
3290	40	13-571	23-872
3291	15	16-770	23-176
3292	24	20-100	23-850
3293	14	20-885	23-287
3294	11	23-210	23-276
3295*	60	4-626	24-224
3296	28	4-641	24-314
3297	25	5-710	24-329
3298	40	6-644	24-893
3299	16	7-877	24-399
3300	32	9-065	24-836
3301	34	11-123	24-242
3302*	66	15-192	24-662
3303	19	16-202	24-797
3304	25	18-292	24-316
3305*	80	18-770	24-044
3306	40	3-950	25-162
3307	11	5-972	25-924
3308	16	13-804	25-474
3309	40	15-316	25-317
3310	27	23-376	25-660

**R.A. 2<sup>h</sup> 20<sup>m</sup>**

Plate 852; 1916 Nov. 27.

*Provisional Constants.*

A	B	C
-0.2567	+0.0422	+2.206

D	E	F
-0.0452	-0.2561	-2.232

 $Mag. = 17.1 - 1.09\sqrt{d}$ 

No.	d	x	y
3351	31	5-988	0-996
3352	8	11-819	0-750
3353	23	15-818	0-398
3354	11	17-985	0-778
3355	31	2-608	1-254
3356	31	14-564	1-618
3357	8	15-598	1-390
3358	10	16-029	1-084
3359	8	22-035	1-934
3360	26	5-048	2-317
3361*	95	5-585	2-115
3362	10	13-968	2-663
3363	25	14-003	2-402
3364	30	19-056	2-743
3365	10	23-620	2-331
3366	32	6-266	3-329
3367	13	8-659	3-854
3368	26	10-735	3-518
3369	39	12-022	3-899
3370	36	16-211	3-553
3371	16	19-650	3-463
3372	8	22-536	3-305
3373	15	23-209	3-152
3374	11	25-778	3-003
3375	23	2-664	4-731
3376	43	6-765	4-164
3377	8	8-132	4-628
3378*	47	9-120	4-725
3379	30	15-395	4-620
3380	24	15-770	4-016
3381	13	18-482	4-502
3382	11	19-718	4-284
3383	16	6-155	5-488
3384	45	12-214	5-532
3385	14	12-238	5-850
3386	11	15-514	5-683
3387	21	23-385	5-854
3388	9	3-708	6-353
3389	11	13-499	6-244
3390	14	18-714	6-766
3391	8	25-665	6-825
3392	38	1-560	7-612
3393	28	2-184	7-685
3394	10	4-475	7-560
3395	8	8-437	7-200
3396*	48	12-094	7-906
3397	37	12-109	7-911
3398	25	14-516	7-706
3399	36	17-183	7-826
3400	9	20-804	7-154
3401	15	5-700	8-443
3402	38	20-712	8-110
3403	14	22-760	8-291
3404	12	25-094	8-146
3405	12	2-903	9-155

3406	8	11-886	9-626
3407	8	13-187	9-654
3408	34	13-427	9-118
3409	15	13-425	9-778
3410	28	15-461	9-755
3411	16	17-256	9-000
3412	9	17-434	9-618
3413	38	19-400	9-180
3414	8	3-168	10-736
3415	35	3-996	10-876
3416	11	5-955	10-334
3417	9	7-544	10-916
3418*	96	8-100	10-168
3419	13	10-350	10-631
3420	8	10-892	10-474
3421	30	12-735	10-424
3422	9	13-302	10-360
3423	9	21-266	10-560
3424	38	1-390	11-280
3425	10	5-422	11-673
3426	8	7-847	11-651
3427	12	9-010	11-760
3428	15	14-332	11-761
3429	20	19-982	11-320
3430	11	20-781	11-844
3431	14	21-975	11-101
3432	28	23-465	11-154
3433	38	0-579	12-244
3434	31	5-194	12-311
3435	10	7-800	12-060
3436	27	8-000	12-718
3437	8	9-330	12-602
3438	16	10-182	12-100
3439	30	11-164	12-272
3440	41	15-104	12-900
3441	9	19-674	12-130
3442	8	25-078	12-533
3443*	49	25-244	12-142
3444	14	2-224	13-607
3445	14	2-378	13-903
3446	26	4-224	13-560
3447	13	10-429	13-587
3448	21	11-534	13-564
3449	15	18-844	13-212
3450	10	20-050	13-550
3451	8	21-515	13-040
3452	14	21-992	13-702
3453	23	22-848	13-618
3454*	70	24-545	13-156
3455	8	25-100	13-352
3456	15	3-296	14-441
3457	19	4-628	14-847
3458	22	5-942	14-698
3459	37	6-420	14-746
3460	13	10-115	14-288
3461	18	11-825	14-248
3462	33	13-524	14-106
3463	12	16-880	14-182
3464	10	18-950	14-072
3465	15	20-740	14-632
3466	9	25-036	14-242
3467	20	6-996	15-002
3468	8	13-548	15-458
3469	9	15-700	15-792
3470	8	18-906	15-322
3471	16	19-136	15-416
3472	18	19-714	15-136
3473	24	23-380	15-875
3474	8	2-787	16-532
3475	12	8-350	16-474
3476	27	10-866	16-308
3477	24	11-385	16-830

3478	12	12-394	16-796
3479	9	14-034	16-664
3480	9	15-074	16-647
3481	25	18-622	16-850
3482	8	19-125	16-515
3483	44	23-350	16-572
3484	11	23-673	16-626
3485	8	6-457	17-241
3486	23	11-957	17-800
3487	10	15-308	17-633
3488	22	15-716	17-306
3489	21	21-190	17-630
3490	25	23-174	17-796
3491	15	3-200	18-554
3492	8	4-870	18-214
3493	19	5-832	18-392
3494	13	10-080	18-659
3495*	45	18-029	18-699
3496	31	21-635	18-910
3497	24	3-319	19-857
3498	8	8-772	19-674
3499	25	16-244	19-054
3500	12	21-628	19-599
3501	35	12-150	20-555
3502	11	15-116	20-653
3503	45	19-809	20-996
3504	18	21-454	20-468
3505*	76	25-280	20-974
3506	8	25-310	20-441
3507	35	3-956	21-286
3508	25	5-518	21-600
3509	8	5-605	21-350
3510	22	7-576	21-248
3511	18	7-922	21-589
3512	10	13-200	21-710
3513	10	13-367	21-520
3514	8	15-554	21-346
3515	30	18-786	21-903
3516	13	18-906	21-516
3517	10	11-000	22-807
3518	8	18-554	22-084
3519	9	20-024	22-976
3520	13	7-744	23-049
3521	17	8-444	23-093
3522	21	11-271	23-572
3523	8	16-094	23-986
3524	16	17-576	23-829
3525	13	21-322	23-540
3526	37	22-137	23-718
3527	13	22-816	23-832
3528	27	24-192	23-956
3529	8	8-621	24-486
3530	8	11-930	24-320
3531	29	17-900	24-802
3532	32	19-566	24-040
3533	10	1-760	25-712
3534	12	8-106	25-055
3535	8	10-786	25-893
3536	8	13-878	25-582
3537	31	20-582	25-250

**R.A. 2<sup>h</sup> 28<sup>m</sup>**

Plate 904; 1916 Dec. 16.

*Provisional Constants.*

A	B	C
-0.2536	+0.0300	+2.918

D	E	F
-0.0335	-0.2573	-2.113

 $Mag. = 16.9 - 1.09\sqrt{d}$ 

No.	d	x	y
3551	9	1·366	0·056
3552	9	7·330	0·880
3553	23	15·224	0·498
3554	15	15·494	0·230
3555	22	6·117	1·222
3556	12	9·550	1·724
3557	20	15·069	1·471
3558*	68	15·106	1·092
3559*	125	22·068	1·520
3560	8	22·366	1·582
3561	36	4·974	2·488
3562	19	6·920	2·120
3563	8	7·560	2·315
3564	33	10·380	2·689
3565	17	10·702	2·307
3566	13	17·922	2·813
3567	16	22·572	2·423
3568	10	1·055	3·271
3569	16	3·621	3·092
3570	10	7·426	3·315
3571	14	11·232	3·528
3572	10	11·638	3·269
3573	10	4·649	4·767
3574	16	7·950	4·125
3575	32	14·398	4·158
3576	8	14·634	4·328
3577	12	22·981	4·482
3578	15	1·259	5·968
3579	32	4·877	5·750
3580*	34	9·748	5·780
3581	10	11·279	5·566
3582	25	11·354	5·289
3583	21	12·116	5·084
3584	29	18·750	5·094
3585	14	19·775	5·004
3586	13	5·808	6·375
3587	18	8·400	6·855
3588	28	11·222	6·920
3589*	47	12·775	6·400
3590	31	13·520	6·684
3591	10	14·574	6·846
3592	10	22·533	6·292
3593	12	25·434	6·812
3594	18	5·872	7·276
3595	11	24·333	7·184
3596	13	0·655	8·414
3597	17	2·985	8·242
3598	10	3·080	8·446
3599	8	13·307	8·580
3600	9	14·140	8·094
3601	12	16·194	8·644
3602	25	19·146	8·101
3603	9	21·406	8·034
3604	30	5·322	9·778
3605*	42	15·149	9·882



3606	11	18-890	9-500	3678	8	23-721	19-274	3759	16	22-703	1-576	3831	17	24-225	11-168	3903	24	13-582	19-789
3607	8	22-506	9-584	3679	9	3-330	20-538	3760	27	0-155	2-496	3832	16	1-004	12-888	3904	15	15-601	19-836
3608*	42	14-280	10-038	3680	29	5-026	20-265	3761	16	3-314	2-302	3833	13	4-388	12-262	3905	14	16-928	19-200
3609	13	16-222	10-280	3681	12	9-257	20-402	3762	23	10-708	2-419	3834	32	4-844	12-104	3906*	40	17-366	19-914
3610	9	19-791	10-922	3682	8	16-362	20-154	3763	19	11-212	2-737	3835	16	4-965	12-266	3907	14	17-459	19-956
3611	29	21-786	10-844	3683*	44	17-905	20-089	3764	19	14-520	2-520	3836	16	7-082	12-864	3908	14	19-908	19-596
3612	19	1-387	11-269	3684	46	24-322	20-960	3765	15	16-574	2-400	3837	11	7-636	12-844	3909	17	2-878	20-221
3613	8	7-600	11-164	3685	10	25-104	20-176	3766	14	19-714	2-832	3838*	56	13-974	12-774	3910	24	8-864	20-458
3614*	43	11-822	11-388	3686*	77	3-300	21-068	3767	15	23-020	2-722	3839	11	18-034	12-570	3911	21	10-062	20-599
3615	28	12-868	11-592	3687	10	17-372	21-530	3768*	57	14-298	3-622	3840	20	20-457	12-753	3912	37	12-202	20-066
3616	21	15-297	11-884	3688	19	22-624	21-680	3769*	42	18-274	3-128	3841*	120	25-101	12-366	3913	17	13-422	20-276
3617	15	17-741	11-008	3689	15	23-026	21-144	3770	19	23-794	3-292	3842	20	1-078	13-850	3914	22	19-716	20-825
3618	26	18-300	11-577	3690	10	23-059	21-154	3771*	60	24-790	3-101	3843	19	4-889	13-034	3915	31	0-416	21-752
3619	11	22-498	11-494	3691	11	3-564	22-148	3772	17	0-590	4-551	3844	12	8-556	13-276	3916	21	0-814	21-210
3620*	54	3-172	12-240	3692	9	7-704	22-036	3773	19	5-208	4-096	3845	20	9-748	13-598	3917	16	0-845	21-217
3621	10	6-040	12-022	3693	14	10-642	22-020	3774	16	6-786	4-005	3846	12	11-826	13-570	3918	40	2-105	21-012
3622	10	7-538	12-096	3694	11	18-646	22-365	3775	15	7-207	4-558	3847	28	12-212	13-265	3919	20	3-995	21-835
3623	11	10-152	12-229	3695	16	25-249	22-422	3776*	36	11-174	4-411	3848	34	13-748	13-747	3920	17	4-592	21-201
3624	12	14-482	12-193	3696	30	0-191	23-843	3777	16	12-552	4-727	3849	26	14-443	13-951	3921	14	6-718	21-029
3625	9	21-613	12-976	3697	14	11-473	23-035	3778	26	17-071	4-494	3850	19	16-652	13-964	3922	18	11-987	21-893
3626	8	22-409	12-864	3698	30	12-734	23-056	3779	16	1-760	5-284	3851	12	16-933	13-005	3923	40	15-140	21-443
3627	11	23-310	12-828	3699	15	13-517	23-562	3780	12	5-156	5-651	3852	37	22-702	13-696	3924	17	19-394	21-321
3628	16	0-794	13-739	3700	10	13-796	23-916	3781	15	5-605	5-628	3853	18	4-233	14-548	3925*	56	19-713	21-508
3629*	78	2-481	13-263	3701	19	15-066	23-278	3782	16	7-586	5-370	3854*	36	6-206	14-196	3926	14	1-767	22-845
3630	26	9-530	13-690	3702	34	21-677	23-954	3783	15	12-898	5-950	3855*	60	12-750	14-520	3927	26	3-050	22-466
3631	15	12-606	13-984	3703	8	22-910	23-460	3784	16	15-162	5-926	3856	12	18-396	14-574	3928	18	5-906	22-550
3632	30	16-166	13-509	3704	11	24-665	23-173	3785*	36	15-372	5-042	3857	15	20-437	14-998	3929	16	12-604	22-796
3633	9	18-870	13-690	3705	10	24-669	23-178	3786	16	16-612	5-214	3858	13	22-258	14-364	3930	17	13-724	22-004
3634	25	19-362	13-220	3706	20	2-149	24-060	3787	17	17-240	5-235	3859	32	0-612	15-650	3931	36	16-814	22-043
3635	13	23-372	13-786	3707	12	4-146	24-672	3788	16	0-156	6-362	3860	19	7-202	15-330	3932*	40	17-609	22-400
3636	11	3-766	14-745	3708	26	8-061	24-604	3789	22	3-064	6-854	3861	17	9-356	15-497	3933	28	21-808	22-292
3637	19	7-943	14-707	3709	10	10-507	24-425	3790	14	5-735	6-365	3862	17	10-916	15-405	3934	23	22-304	22-836
3638	14	21-236	14-844	3710	21	10-927	24-065	3791	24	8-226	6-784	3863	12	11-352	15-637	3935	23	2-476	23-224
3639	17	1-350	15-991	3711*	68	16-240	24-730	3792	19	10-682	6-278	3864	12	14-593	15-616	3936	30	6-338	23-967
3640	31	5-980	15-958	3712	10	8-920	25-720	3793	11	12-240	6-452	3865	16	14-866	15-123	3937	13	16-219	23-326
3641	22	6-324	15-914	3713	11	14-640	25-530	3794*	41	14-266	6-365	3866	11	15-075	15-259	3938	14	19-463	23-379
3642	10	8-668	15-183	3714	57	14-649	25-268	3795	12	14-901	6-644	3867	20	15-607	15-096	3939	13	19-800	23-674
3643	12	16-318	15-678	3715	17	22-326	25-680	3796	11	16-669	6-806	3868	16	20-745	15-127	3940	24	20-896	23-396
3644	20	17-046	15-108	3716	16	24-729	25-889	3797	19	1-966	7-234	3869	12	22-720	15-697	3941	24	23-898	23-933
3645	17	18-724	15-114	3717	12	25-849	25-952	3798	15	3-516	7-524	3870	34	23-599	15-249	3942	13	5-550	24-828
3646	8	22-109	15-274					3799	17	11-305	7-178	3871	26	2-194	16-357	3943	12	6-470	24-825
3647	10	22-567	15-392					3800	20	17-124	7-082	3872	16	2-383	16-516	3944	11	6-538	24-766
3648	24	22-888	15-583					3801	23	17-425	7-357	3873	12	5-135	16-075	3945*	46	15-572	24-163
3649	41	1-326	16-688					3802	37	25-216	7-206	3874	17	9-100	16-368	3946	16	18-228	24-676
3650	12	7-750	16-880					3803	12	2-715	8-486	3875	14	13-666	16-526	3947	13	21-776	24-184
3651	11	20-378	16-553					3804*	44	8-055	8-044	3876	17	13-835	16-346	3948	9	25-850	24-472
3652	21	24-459	16-307					3805	14	18-210	8-798	3877	16	16-915	16-905	3949	26	0-166	25-754
3653	10	24-648	16-466					3806	20	24-428	8-197	3878	34	23-066	16-969	3950	34	2-572	25-936
3654	14	1-164	17-914					3807	15	3-186	9-135	3879	36	23-764	16-961	3951	21	3-693	25-992
3655	16	4-436	17-566					3808	17	4-045	9-355	3880	32	25-029	16-547	3952	18	7-136	25-463
3656	12	7-334	17-553					3809	19	7-281	9-126	3881	32	25-296	16-596	3953	22	10-604	25-384
3657	14	9-602	17-050					3810	15	11-764	9-242	3882	39	0-854	17-085	3954	19	12-635	25-856
3658	10	14-551	17-802					3811	16	12-262	9-059	3883	20	2-174	17-956	3955	17	14-499	25-800
3659	13	21-955	17-557					3812	23	12-756	9-008	3884	19	6-588	17-796	3956	36	14-867	25-496
3660	33	23-116	17-022					3813	18	16-408	9-182	3885	22	6-670	17-285	3957	12	15-782	25-528
3661	9	3-370	18-151					3814*	56	19-953	9-935	3886	15	7-764	17-317	3958	23	19-382	25-376
3662	9	4-992	18-344					3815	16	19-334	9-155	3887*	52	10-194	17-326	3959	37	24-159	25-515
3663	17	5-286	18-574					3816*	36	21-946	9-866	3888	20	14-038	17-464				
3664	27	7-192	18-418					3817	12	22-397	9-554	3889*	38	17-230	17-323				
3665	16	9-660	18-800					3818	37	24-085	9-290	3890*	56	19-788	17-914				
3666	10	20-478	18-419					3819	25	25-080	9-826	3891	16	22-682	17-306				
3667	14	20-850	18-260					3820	13	8-494	10-362	3892	38	23-528	17-213				
3668	13	22-230	18-352					3821	14	10-565	10-924	3893	18	24-439	17-996				
3669	10	23-477	18-055					3822	17	10-686	10-646	3894	18	1-227	18-116				
3670	10	23-988	18-523					3823	28	11-594	10-282	3895	19	1-747	18-583				
3671	8	1-949	19-542					3824	15	14-793	10-718	3896	25	6-466	18-035				
3672	38	11-194	19-320					3825	14	14-995	10-551	3897	18	10-534	18-304				
3673	12	11-692	19-380					3826	24	16-509	10-632	3898	14	10-673	18-536				
3674	21																		



**R.A. 2<sup>h</sup> 44<sup>m</sup>**

Plate 860; 1916 Nov. 28.

*Provisional Constants.*A B C  
-02537 +00285 +1397D E F  
-00310 -02575 -2092 $Mag. = 16.6 - 1.09\sqrt{d}$ 

No.	d	x	y
4001*	54	2.758	0.805
4002*	44	9.410	0.426
4003	10	10.395	0.067
4004	40	11.830	0.316
4005	33	12.354	0.627
4006	9	13.550	0.600
4007	14	17.004	0.561
4008	37	17.602	0.288
4009	9	18.480	0.229
4010	13	0.492	1.672
4011	10	1.670	1.900
4012	9	5.610	1.290
4013	9	8.471	1.904
4014	30	8.630	1.330
4015	10	10.746	1.530
4016	16	16.040	1.795
4017	11	22.902	1.489
4018	8	24.520	1.407
4019	12	25.369	1.610
4020	11	0.820	2.813
4021	9	8.085	2.608
4022	26	9.833	2.313
4023	12	10.736	2.463
4024	30	16.833	2.632
4025	10	21.384	2.408
4026	17	22.581	2.308
4027	23	23.448	2.278
4028	10	24.993	2.453
4029	13	1.601	3.376
4030*	49	2.586	3.173
4031	10	10.501	3.417
4032	11	16.230	3.726
4033	20	3.890	4.712
4034	14	4.642	4.970
4035	15	5.451	4.026
4036	12	8.544	4.380
4037	16	10.313	4.061
4038	15	14.784	4.332
4039	39	16.527	4.437
4040	19	17.744	4.693
4041	8	18.150	4.516
4042	12	21.287	4.177
4043	20	6.875	5.650
4044	14	12.395	5.865
4045	29	12.397	5.306
4046	10	17.509	5.088
4047*	49	23.318	5.660
4048	38	4.782	6.154
4049	9	5.391	6.927
4050*	43	7.030	6.162
4051	10	11.074	6.876
4052	9	11.859	6.587
4053	15	11.862	6.828
4054	15	14.475	6.648
4055	12	17.359	6.452

4056	9	24.010	6.678	4128	16	21.433	14.958
4057	9	2.848	7.092	4129	14	21.620	14.252
4058	32	3.068	7.270	4130*	39	23.352	14.332
4059	14	8.290	7.596	4131	14	25.674	14.742
4060	9	12.350	7.142	4132	22	1.545	15.332
4061	10	14.232	7.153	4133	27	9.251	15.362
4062	26	20.538	7.221	4134	14	12.110	15.562
4063	10	2.294	8.272	4135	13	18.299	15.858
4064	21	5.033	8.955	4136	25	19.410	15.724
4065	22	5.509	8.366	4137	17	20.638	15.403
4066	18	5.640	8.262	4138	8	22.667	15.256
4067*	40	10.664	8.882	4139	10	25.019	15.352
4068	10	12.717	8.712	4140	33	25.208	15.761
4069	8	25.177	8.698	4141	18	2.988	16.611
4070	26	25.228	8.912	4142	21	3.256	16.660
4071	21	1.960	9.370	4143	32	5.788	16.057
4072	14	2.962	9.892	4144	10	5.878	16.049
4073	14	6.444	9.838	4145	16	6.120	16.693
4074	17	9.859	9.722	4146*	60	6.952	16.150
4075*	41	10.102	9.349	4147	37	7.232	16.256
4076*	43	11.058	9.600	4148	31	7.439	16.269
4077	9	13.062	9.212	4149	22	7.858	16.548
4078	22	14.768	9.180	4150*	39	8.451	16.900
4079	11	15.328	9.693	4151	16	16.987	16.328
4080	10	18.792	9.548	4152	20	17.352	16.172
4081	17	21.115	9.719	4153	8	19.450	16.098
4082*	52	22.174	9.760	4154	21	19.896	16.430
4083	10	4.410	10.320	4155	9	23.668	16.684
4084*	43	7.116	10.888	4156	9	25.144	16.838
4085	10	8.768	10.662	4157	11	25.634	16.882
4086	16	8.888	10.830	4158	24	1.031	17.060
4087	9	12.978	10.636	4159	35	1.494	17.294
4088	9	13.674	10.262	4160	25	1.728	17.037
4089	12	15.823	10.477	4161	12	7.348	17.592
4090*	41	24.276	10.745	4162	12	7.979	17.772
4091	10	2.124	11.246	4163*	38	12.398	17.199
4092	22	13.642	11.412	4164*	40	13.658	17.610
4093*	45	16.638	11.028	4165	11	24.810	17.660
4094	13	17.505	11.488	4166	9	24.888	17.732
4095	15	17.602	11.979	4167	13	1.128	18.628
4096	29	18.104	11.426	4168	11	2.414	18.070
4097	13	19.866	11.048	4169	15	5.893	18.880
4098	13	21.976	11.784	4170	9	6.174	18.059
4099*	128	3.005	12.432	4171	10	10.734	18.830
4100	10	4.206	12.492	4172	11	12.186	18.040
4101	12	4.994	12.441	4173	11	13.790	18.580
4102	10	6.730	12.614	4174	12	13.910	18.106
4103	34	14.580	12.980	4175	9	14.426	18.299
4104	20	14.903	12.419	4176	13	18.424	18.045
4105	12	17.324	12.675	4177	13	10.787	19.840
4106	15	17.608	12.590	4178	12	10.876	19.172
4107	14	19.698	12.161	4179*	45	19.584	19.928
4108	12	19.875	12.200	4180	18	4.027	20.186
4109	14	19.977	12.162	4181	13	6.056	20.876
4110	10	22.504	12.128	4182	12	21.176	20.906
4111	33	22.506	12.603	4183	9	24.591	20.892
4112	35	0.626	13.789	4184*	33	11.462	21.629
4113*	32	9.444	13.282	4185	11	13.496	21.725
4114*	51	11.811	13.602	4186	17	14.675	21.578
4115	12	13.849	13.784	4187	33	15.542	21.216
4116	9	16.766	13.368	4188	8	19.382	21.675
4117	14	18.523	13.938	4189	11	0.343	22.932
4118	20	20.286	13.912	4190	25	7.369	22.380
4119	30	22.149	13.421	4191	9	12.966	22.445
4120	18	22.196	13.920	4192	13	13.302	22.237
4121	15	23.652	13.330	4193	11	15.732	22.940
4122	23	24.541	13.328	4194	14	17.056	22.220
4123	9	0.196	14.461	4195	13	17.302	22.893
4124	8	9.549	14.816	4196	44	17.526	22.903
4125	17	14.870	14.192	4197	42	17.643	22.883
4126	12	17.912	14.356	4198	10	3.388	23.538
4127	15	18.264	14.382	4199	10	4.832	23.726

4200	12	5.750	23.421
4201	16	10.646	23.826
4202	12	13.219	23.009
4203	17	1.946	24.010
4204	19	6.560	24.060
4205	19	7.706	24.956
4206	9	11.339	24.221
4207	34	11.844	24.190
4208	10	22.028	24.086
4209	10	22.468	24.144
4210	29	23.970	24.498
4211	29	2.228	25.590
4212	30	6.553	25.020
4213	9	19.090	25.097

**R.A. 2<sup>h</sup> 52<sup>m</sup>**

Plate 898; 1916 Dec. 15.

*Provisional Constants.*A B C  
-02574 +00484 +2200D E F  
-00489 -02560 -3221 $Mag. = 16.5 - 1.09\sqrt{d}$ 

No.	d	x	y
4251	18	8.234	0.800
4252	11	14.747	0.778
4253	38	19.754	0.085
4254	34	8.512	1.208
4255	10	11.536	1.137
4256*	39	17.318	1.204
4257	24	19.933	1.260
4258	12	0.430	2.280
4259	30	1.294	2.239
4260	18	5.048	2.954
4261	17	5.441	2.167
4262	25	8.383	2.251
4263	8	19.628	2.138
4264	9	4.324	3.817
4265	32	7.030	3.442
4266	9	15.173	3.049
4267*	48	25.400	3.646
4268	29	25.608	3.985
4269	10	2.246	4.313
4270	10	12.208	4.167
4271	10	17.915	4.187
4272	10	19.132	4.081
4273*	50	1.200	5.623
4274	10	7.480	5.994
4275	28	10.885	5.852
4276	10	12.990	5.684
4277	14	13.393	5.658
4278	14	4.228	6.784
4279	23	10.086	6.861
4280	10	13.388	6.974
4281	29	17.183	6.805
4282*	48	20.731	6.824
4283	10	6.715	7.384
4284	12	8.686	7.092

4285	28	9.415	7.830
4286	26	10.202	7.860
4287	24	10.635	7.108
4288	39	17.246	7.650
4289	30	19.955	7.228
4290	10	25.844	7.014
4291	30	3.156	8.849
4292	12	10.925	8.206
4293	26	14.770	8.192
4294	31	18.811	8.362
4295	58	0.109	9.736
4296	31	8.665	9.776
4297	11	15.414	9.725
4298	29	15.764	9.190
4299*	41	2.224	10.696
4300	34	5.794	10.838
4301	29	11.855	10.504
4302	24	16.380	10.272
4303*	36	16.408	10.398
4304	30	20.535	10.529
4305	30	6.276	11.016
4306	8	12.470	11.752
4307	10	14.632	11.570
4308	15	24.978	11.829
4309	11	0.473	12.104
4310	34	0.481	12.574
4311	26	7.534	12.764
4312	30	7.899	12.706
4313	8	13.620	12.414
4314	17	15.220	12.478
4315	19	15.562	12.892
4316	11	17.192	12.144
4317	29	22.871	12.132
4318	31	0.135	13.396



4357	12	5.730	17.444	<div>R.A. 3<sup>h</sup> 0<sup>m</sup></div> <div>Plate 893; 1916 Dec. 14.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>-02571 -00133 +1469</div> <div>D E F</div> <div>+00151 -02578 -1819</div> <div>Mag.=16.1-1.09√d</div> <table><tr><td>No.</td><td>d</td><td>x</td><td>y</td></tr><tr><td>4451</td><td>16</td><td>5.452</td><td>0.554</td></tr><tr><td>4452*</td><td>37</td><td>13.517</td><td>0.256</td></tr><tr><td>4453</td><td>16</td><td>15.246</td><td>0.025</td></tr><tr><td>4454</td><td>25</td><td>19.465</td><td>0.448</td></tr><tr><td>4455</td><td>16</td><td>3.158</td><td>1.362</td></tr><tr><td>4456</td><td>20</td><td>6.786</td><td>1.526</td></tr><tr><td>4457</td><td>12</td><td>11.376</td><td>1.602</td></tr><tr><td>4458</td><td>15</td><td>13.358</td><td>1.364</td></tr><tr><td>4459</td><td>30</td><td>19.114</td><td>1.066</td></tr><tr><td>4460</td><td>11</td><td>25.132</td><td>1.342</td></tr><tr><td>4461*</td><td>31</td><td>4.162</td><td>2.173</td></tr><tr><td>4462*</td><td>56</td><td>11.104</td><td>2.319</td></tr><tr><td>4463</td><td>24</td><td>11.349</td><td>2.576</td></tr><tr><td>4464</td><td>13</td><td>12.636</td><td>2.886</td></tr><tr><td>4465</td><td>17</td><td>16.224</td><td>2.193</td></tr><tr><td>4466*</td><td>58</td><td>3.082</td><td>3.893</td></tr><tr><td>4467</td><td>14</td><td>14.962</td><td>3.468</td></tr><tr><td>4468*</td><td>36</td><td>16.371</td><td>3.171</td></tr><tr><td>4469</td><td>34</td><td>3.296</td><td>4.224</td></tr><tr><td>4470</td><td>13</td><td>3.326</td><td>4.219</td></tr><tr><td>4471</td><td>13</td><td>7.750</td><td>4.726</td></tr><tr><td>4472</td><td>21</td><td>16.330</td><td>4.223</td></tr><tr><td>4473</td><td>14</td><td>16.886</td><td>4.194</td></tr><tr><td>4474</td><td>26</td><td>20.372</td><td>4.254</td></tr><tr><td>4475</td><td>19</td><td>22.025</td><td>4.756</td></tr><tr><td>4476</td><td>20</td><td>6.516</td><td>5.106</td></tr><tr><td>4477</td><td>14</td><td>9.270</td><td>5.738</td></tr><tr><td>4478</td><td>18</td><td>12.458</td><td>5.365</td></tr><tr><td>4479</td><td>19</td><td>12.899</td><td>5.716</td></tr><tr><td>4480</td><td>23</td><td>17.762</td><td>5.096</td></tr><tr><td>4481*</td><td>43</td><td>20.995</td><td>5.582</td></tr><tr><td>4482</td><td>15</td><td>25.844</td><td>5.636</td></tr><tr><td>4483</td><td>21</td><td>6.618</td><td>6.356</td></tr><tr><td>4484*</td><td>37</td><td>6.752</td><td>6.979</td></tr><tr><td>4485</td><td>21</td><td>7.829</td><td>6.244</td></tr><tr><td>4486*</td><td>44</td><td>8.810</td><td>6.270</td></tr><tr><td>4487</td><td>20</td><td>11.174</td><td>6.477</td></tr><tr><td>4488</td><td>21</td><td>22.850</td><td>6.874</td></tr><tr><td>4489</td><td>15</td><td>3.549</td><td>7.256</td></tr><tr><td>4490</td><td>34</td><td>4.675</td><td>7.975</td></tr><tr><td>4491*</td><td>69</td><td>5.726</td><td>7.851</td></tr><tr><td>4492</td><td>28</td><td>9.694</td><td>7.142</td></tr><tr><td>4493</td><td>30</td><td>12.348</td><td>7.768</td></tr><tr><td>4494</td><td>17</td><td>16.034</td><td>7.646</td></tr><tr><td>4495</td><td>34</td><td>24.267</td><td>7.062</td></tr><tr><td>4496</td><td>32</td><td>24.949</td><td>7.185</td></tr><tr><td>4497</td><td>18</td><td>4.528</td><td>8.902</td></tr><tr><td>4498*</td><td>40</td><td>8.488</td><td>8.106</td></tr><tr><td>4499</td><td>14</td><td>13.752</td><td>8.228</td></tr><tr><td>4500</td><td>19</td><td>16.785</td><td>8.646</td></tr><tr><td>4501</td><td>23</td><td>16.802</td><td>8.941</td></tr><tr><td>4502</td><td>19</td><td>20.482</td><td>8.022</td></tr><tr><td>4503</td><td>36</td><td>21.078</td><td>8.169</td></tr><tr><td>4504</td><td>12</td><td>5.944</td><td>9.936</td></tr><tr><td>4505</td><td>15</td><td>6.829</td><td>9.820</td></tr></table>	No.	d	x	y	4451	16	5.452	0.554	4452*	37	13.517	0.256	4453	16	15.246	0.025	4454	25	19.465	0.448	4455	16	3.158	1.362	4456	20	6.786	1.526	4457	12	11.376	1.602	4458	15	13.358	1.364	4459	30	19.114	1.066	4460	11	25.132	1.342	4461*	31	4.162	2.173	4462*	56	11.104	2.319	4463	24	11.349	2.576	4464	13	12.636	2.886	4465	17	16.224	2.193	4466*	58	3.082	3.893	4467	14	14.962	3.468	4468*	36	16.371	3.171	4469	34	3.296	4.224	4470	13	3.326	4.219	4471	13	7.750	4.726	4472	21	16.330	4.223	4473	14	16.886	4.194	4474	26	20.372	4.254	4475	19	22.025	4.756	4476	20	6.516	5.106	4477	14	9.270	5.738	4478	18	12.458	5.365	4479	19	12.899	5.716	4480	23	17.762	5.096	4481*	43	20.995	5.582	4482	15	25.844	5.636	4483	21	6.618	6.356	4484*	37	6.752	6.979	4485	21	7.829	6.244	4486*	44	8.810	6.270	4487	20	11.174	6.477	4488	21	22.850	6.874	4489	15	3.549	7.256	4490	34	4.675	7.975	4491*	69	5.726	7.851	4492	28	9.694	7.142	4493	30	12.348	7.768	4494	17	16.034	7.646	4495	34	24.267	7.062	4496	32	24.949	7.185	4497	18	4.528	8.902	4498*	40	8.488	8.106	4499	14	13.752	8.228	4500	19	16.785	8.646	4501	23	16.802	8.941	4502	19	20.482	8.022	4503	36	21.078	8.169	4504	12	5.944	9.936	4505	15	6.829	9.820	4506	13	6.902	9.595	4578	16	11.870	19.246	4657	10	5.246	1.138
No.	d	x	y																																																																																																																																																																																																																																													
4451	16	5.452	0.554																																																																																																																																																																																																																																													
4452*	37	13.517	0.256																																																																																																																																																																																																																																													
4453	16	15.246	0.025																																																																																																																																																																																																																																													
4454	25	19.465	0.448																																																																																																																																																																																																																																													
4455	16	3.158	1.362																																																																																																																																																																																																																																													
4456	20	6.786	1.526																																																																																																																																																																																																																																													
4457	12	11.376	1.602																																																																																																																																																																																																																																													
4458	15	13.358	1.364																																																																																																																																																																																																																																													
4459	30	19.114	1.066																																																																																																																																																																																																																																													
4460	11	25.132	1.342																																																																																																																																																																																																																																													
4461*	31	4.162	2.173																																																																																																																																																																																																																																													
4462*	56	11.104	2.319																																																																																																																																																																																																																																													
4463	24	11.349	2.576																																																																																																																																																																																																																																													
4464	13	12.636	2.886																																																																																																																																																																																																																																													
4465	17	16.224	2.193																																																																																																																																																																																																																																													
4466*	58	3.082	3.893																																																																																																																																																																																																																																													
4467	14	14.962	3.468																																																																																																																																																																																																																																													
4468*	36	16.371	3.171																																																																																																																																																																																																																																													
4469	34	3.296	4.224																																																																																																																																																																																																																																													
4470	13	3.326	4.219																																																																																																																																																																																																																																													
4471	13	7.750	4.726																																																																																																																																																																																																																																													
4472	21	16.330	4.223																																																																																																																																																																																																																																													
4473	14	16.886	4.194																																																																																																																																																																																																																																													
4474	26	20.372	4.254																																																																																																																																																																																																																																													
4475	19	22.025	4.756																																																																																																																																																																																																																																													
4476	20	6.516	5.106																																																																																																																																																																																																																																													
4477	14	9.270	5.738																																																																																																																																																																																																																																													
4478	18	12.458	5.365																																																																																																																																																																																																																																													
4479	19	12.899	5.716																																																																																																																																																																																																																																													
4480	23	17.762	5.096																																																																																																																																																																																																																																													
4481*	43	20.995	5.582																																																																																																																																																																																																																																													
4482	15	25.844	5.636																																																																																																																																																																																																																																													
4483	21	6.618	6.356																																																																																																																																																																																																																																													
4484*	37	6.752	6.979																																																																																																																																																																																																																																													
4485	21	7.829	6.244																																																																																																																																																																																																																																													
4486*	44	8.810	6.270																																																																																																																																																																																																																																													
4487	20	11.174	6.477																																																																																																																																																																																																																																													
4488	21	22.850	6.874																																																																																																																																																																																																																																													
4489	15	3.549	7.256																																																																																																																																																																																																																																													
4490	34	4.675	7.975																																																																																																																																																																																																																																													
4491*	69	5.726	7.851																																																																																																																																																																																																																																													
4492	28	9.694	7.142																																																																																																																																																																																																																																													
4493	30	12.348	7.768																																																																																																																																																																																																																																													
4494	17	16.034	7.646																																																																																																																																																																																																																																													
4495	34	24.267	7.062																																																																																																																																																																																																																																													
4496	32	24.949	7.185																																																																																																																																																																																																																																													
4497	18	4.528	8.902																																																																																																																																																																																																																																													
4498*	40	8.488	8.106																																																																																																																																																																																																																																													
4499	14	13.752	8.228																																																																																																																																																																																																																																													
4500	19	16.785	8.646																																																																																																																																																																																																																																													
4501	23	16.802	8.941																																																																																																																																																																																																																																													
4502	19	20.482	8.022																																																																																																																																																																																																																																													
4503	36	21.078	8.169																																																																																																																																																																																																																																													
4504	12	5.944	9.936																																																																																																																																																																																																																																													
4505	15	6.829	9.820																																																																																																																																																																																																																																													
4507	28	10.236	9.816		4579	16	13.352	19.182	4658*	31	10.634	1.767																																																																																																																																																																																																																																				
4508	34	13.954	9.711		4580*	26	16.834	19.306	4659	20	12.652	1.561																																																																																																																																																																																																																																				
4509	16	15.976	9.156		4581	15	17.113	19.028	4660	11	14.130	1.816																																																																																																																																																																																																																																				
4510	26	21.356	9.279		4582	20	18.094	19.656	4661	21	14.938	1.368																																																																																																																																																																																																																																				
4511	13	2.562	10.584		4583	25	18.512	19.495	4662	17	17.828	1.928																																																																																																																																																																																																																																				
4512	26	6.673	10.134		4584	17	2.058	20.986	4663	20	5.572	2.514																																																																																																																																																																																																																																				
4513*	36	7.793	10.559		4585	26	2.784	20.226	4664*	30	5.688	2.913																																																																																																																																																																																																																																				
4514	11	7.999	10.316		4586	16	10.020	20.494	4665	10	10.678	2.711																																																																																																																																																																																																																																				
4515	17	12.195	10.393		4587	16	11.892	20.007	4666	23	12.213	2.219																																																																																																																																																																																																																																				
4516	15	13.529	10.448		4588	16	14.176	20.154	4667	9	12.962	2.935																																																																																																																																																																																																																																				
4517	19	17.818	10.640		4589	13	15.610	20.642	4668	17	13.954	2.315																																																																																																																																																																																																																																				
4518	18	22.056	10.682	4590*	37	16.886	20.422	4669	8	19.213	2.348																																																																																																																																																																																																																																					
4519	30	23.812	10.126	4591	13	20.784	20.486	4670	11	4.257	3.618																																																																																																																																																																																																																																					
4520	17	8.632	11.480	4592*	44	21.594	20.494	4671	16	8.944	3.872																																																																																																																																																																																																																																					
4521*	38	8.710	11.326	4593*	64	22.720	20.584	4672	12	9.090	3.118																																																																																																																																																																																																																																					
4522	15	9.931	11.812	4594*	52	5.432	21.214	4673	30	10.375	3.738																																																																																																																																																																																																																																					
4523	14	13.724	11.286	4595	20	5.611	21.736	4674	27	11.933	3.365																																																																																																																																																																																																																																					
4524	20	21.164	11.626	4596	12	10.150	21.073	4675	12	16.492	3.167																																																																																																																																																																																																																																					
4525	24	0.600	12.384	4597	28	14.904	21.710	4676*	48	17.083	3.506																																																																																																																																																																																																																																					
4526	18	2.706	12.076	4598	22	21.525	21.552	4677	21	18.271	3.961																																																																																																																																																																																																																																					
4527	14	3.254	12.990	4599	37	0.124	22.922	4678	12	19.242	3.896																																																																																																																																																																																																																																					
4528	18	8.310	12.840	4600	26	10.824	22.108	4679	19	22.746	3.844																																																																																																																																																																																																																																					
4529	30	13.004	12.336	4601	22	22.587	22.238	4680	12	23.289	3.296																																																																																																																																																																																																																																					
4530	21	13.950	12.188	4602	31	2.258	23.245	4681	15	24.568	3.384																																																																																																																																																																																																																																					
4531	15	14.778	12.808	4603*	38	10.188	23.922	4682	9	1.096	4.092																																																																																																																																																																																																																																					
4532	22	18.002	12.870	4604	23	10.624	23.174	4683	9	1.206	4.674																																																																																																																																																																																																																																					
4533	21	18.962	12.275	4605	15	12.414	23.775	4684	11	2.618	4.477																																																																																																																																																																																																																																					
4534	14	11.302	13.092	4606	32	16.678	23.599	4685	10	2.784	4.642																																																																																																																																																																																																																																					
4535	28	19.012	13.816	4607	24	20.326	23.298	4686	16	4.888	4.998																																																																																																																																																																																																																																					
4536	23	21.823	13.505	4608	40	22.314	23.600	4687	10	11.263	4.356																																																																																																																																																																																																																																					
4537	14	3.024	14.203	4609	15	0.096	24.052	4688	16	13.484	4.112																																																																																																																																																																																																																																					
4538	22	10.574	14.134	4610	26	3.627	24.996	4689	10	17.165	4.402																																																																																																																																																																																																																																					
4539	30	14.062	14.050	4611*	40	9.300	24.126	4690	16	19.027	4.082																																																																																																																																																																																																																																					
4540	13	17.186	14.004	4612	24	12.443	24.555	4691*	39	20.553	4.388																																																																																																																																																																																																																																					
4541	27	17.239	14.066	4613	18	12.560	24.399	4692	20	20.763	4.507																																																																																																																																																																																																																																					
4542*	46	18.939	14.434	4614	26	17.144	24.690	4693	13	21.364	4.997																																																																																																																																																																																																																																					
4543	23	20.402	14.141	4615	19	19.404	24.932	4694	8	3.344	5.218																																																																																																																																																																																																																																					
4544	32	22.106	14.443	4616	52	23.176	24.984	4695	13	3.795	5.530																																																																																																																																																																																																																																					
4545*	37	0.462	15.666	4617	26	7.974	25.482	4696*	35	4.650	5.986																																																																																																																																																																																																																																					
4546	14	5.076	15.144	4618	20	15.556	25.772	4697	12	5.726	5.480																																																																																																																																																																																																																																					
4547	18	5.230	15.293	4619	16	18.634	25.736	4698	19	10.374	5.700																																																																																																																																																																																																																																					
4548	12	18.330	15.005					4699	21	14.130	5.610																																																																																																																																																																																																																																					
4549	17	23.094	15.112					4700	8	14.218	5.502																																																																																																																																																																																																																																					
4550	58	25.374	15.634					4701	25	14.252	5.806																																																																																																																																																																																																																																					
4551	32	2.698	16.463					4702	17	14.532	5.174																																																																																																																																																																																																																																					
4552	13	5.954	16.094					4703	9	19.394	5.112																																																																																																																																																																																																																																					
4553	34	5.989	16.600					4704	8	22.033	5.086																																																																																																																																																																																																																																					
4554	20	9.206	16.523					4705	8	23.648	5.536																																																																																																																																																																																																																																					
4555	16	9.994	16.366					4706	10	25.678	5.946																																																																																																																																																																																																																																					
4556	17	19.164	16.656					4707	17	0.826	6.813																																																																																																																																																																																																																																					
4557	28	22.160	16.434					4708	27	2.241	6.981																																																																																																																																																																																																																																					
4558*	80	24.782	16.681					4709	10	2.842	6.589																																																																																																																																																																																																																																					
4559	14	1.612	17.254					4710	11	7.226	6.763																																																																																																																																																																																																																																					
4560	26	2.002	17.672					4711	24	2.926	7.094																																																																																																																																																																																																																																					
4561	18	12.231	17.476					4712	10	4.846	7.724																																																																																																																																																																																																																																					
4562*	52	14.588	17.999					4713	12	5.625	7.426																																																																																																																																																																																																																																					
4563	18	14.848	17.233					4714	13	9.032	7.535																																																																																																																																																																																																																																					
4564	15	17.281	17.214					4715	10	12.734	7.678																																																																																																																																																																																																																																					
4565	22	22.914	17.176					4716*	31	13.257	7.618																																																																																																																																																																																																																																					
4566	21	23.116	17.864					4717	11	13.739	7.544																																																																																																																																																																																																																																					
4567	25	2.376	18.067					4718	21	14.203	7.637																																																																																																																																																																																																																																					
4568	23	4.792	18.542					4719	24	18.318	7.752																																																																																																																																																																																																																																					
4569	15	6.902	18.117					4720*	67	21.066	7.080																																																																																																																																																																																																																																					
4570	19	14.930	18.810					4721*	41	22.432	7.798																																																																																																																																																																																																																																					
4571	18	16.041	18.102					4722	12	22.692	7.012																																																																																																																																																																																																																																					
4572	26	16.207	18.784					4723	29	24.094	7.256																																																																																																																																																																																																																																					
4573	14	18.315	18.216					4724	11	3.762	8.312																																																																																																																																																																																																																																					
4574	18	25.420	18.084					4725*	41	8.265	8.898																																																																																																																																																																																																																																					
4575	26	1.554	19.234					4726	13	10.444	8.768																																																																																																																																																																																																																																					
4576	16	5.812	19.162					4727	10	19.160	8.526																																																																																																																																																																																																																																					
4577	13	11.122	19.133					4728	12	25.934	8.813																																																																																																																																																																																																																																					

| R.A. 3<sup>h</sup> 8<sup>m</sup>  Plate 905; 1916 Dec. 12.  Provisional Constants.  A B C  -02571 +00282 +2804  D E F  -00321 -02574 -2200  Mag.=16.2-1.09√d   |       |    |        |       | |-------|----|--------|-------| | No.   | d  | x      | y     | | 4651  | 9  | 3.369  | 0.806 | | 4652  | 8  | 11.298 | 0.522 | | 4653  | 12 | 12.200 | 0.956 | | 4654  | 16 | 13.639 | 0.261 | | 4655* | 50 | 14.503 | 0.771 | | 4656* | 38 | 15.330 | 0.628 | | | | | | | | | | | | | |



4729	19	5.618	9.384	4801	19	15.770	16.760	4873	18	15.010	23.944	4930	18	0.444	3.999	5002	19	21.710	10.447
4730	8	7.283	9.795	4802	8	18.994	16.372	4874	11	15.346	23.490	4931	12	0.990	3.443	5003	24	22.628	10.956
4731	21	9.232	9.612	4803	11	21.274	16.844	4875	14	16.556	23.769	4932	20	2.272	3.512	5004*	54	23.488	10.412
4732	12	12.444	9.837	4804	10	21.715	16.032	4876	18	18.368	23.144	4933	10	3.723	3.761	5005	14	1.256	11.218
4733	18	18.936	9.788	4805	26	22.253	16.086	4877	12	20.167	23.162	4934	12	4.404	3.959	5006	10	2.640	11.382
4734	19	21.495	9.933	4806	30	22.580	16.404	4878	15	23.724	23.600	4935	31	7.238	3.996	5007	9	5.058	11.227
4735*	46	21.964	9.289	4807	15	1.046	17.112	4879	40	1.428	24.913	4936	21	7.256	3.142	5008*	142	7.728	11.594
4736	10	23.767	9.946	4808	18	1.262	17.799	4880	12	11.794	24.210	4937	10	9.043	3.888	5009	29	18.277	11.425
4737	9	0.088	10.632	4809	10	3.454	17.660	4881	13	14.672	24.884	4938	25	10.870	3.297	5010	10	18.734	11.278
4738	21	1.831	10.050	4810	14	3.565	17.983	4882	35	17.658	24.910	4939	21	11.710	3.303	5011	10	18.742	11.884
4739*	38	4.852	10.469	4811*	38	4.787	17.270	4883	10	18.492	24.251	4940	13	12.256	3.243	5012	11	20.147	11.875
4740	25	5.168	10.092	4812	12	5.014	17.816	4884	18	22.895	24.176	4941	10	12.570	3.864	5013	21	20.473	11.000
4741	15	8.891	10.296	4813	9	5.094	17.934	4885	16	23.280	24.098	4942	9	13.179	3.322	5014	21	21.574	11.875
4742	13	10.068	10.104	4814	28	7.270	17.478	4886	16	25.206	24.061	4943	10	17.383	3.919	5015	12	24.086	11.013
4743	9	11.072	10.667	4815	8	11.903	17.707	4887	9	1.376	25.595	4944	11	17.664	3.393	5016*	38	25.280	11.456
4744	13	11.090	10.002	4816	10	12.020	17.078	4888	23	8.458	25.422	4945	16	18.086	3.055	5017	10	1.300	12.136
4745*	39	13.950	10.238	4817	13	17.245	17.315	4889	27	14.279	25.522	4946	21	7.846	4.355	5018	22	3.569	12.477
4746	19	14.124	10.918	4818	10	18.264	17.119	4890	11	18.660	25.309	4947	15	8.065	4.594	5019*	47	6.866	12.277
4747	9	16.052	10.998	4819	8	19.640	17.810	4891	12	25.916	25.304	4948	13	8.253	4.932	5020	13	9.017	12.418
4748	10	16.143	10.363	4820	26	21.645	17.399					4949	10	11.150	4.643	5021	22	10.537	12.262
4749	8	23.214	10.632	4821	17	22.281	17.738					4950	14	18.076	4.574	5022	13	16.778	12.309
4750	14	6.376	11.520	4822	22	25.112	17.974					4951	10	18.900	4.556	5023	20	11.001	12.794
4751	19	9.870	11.000	4823	14	3.064	18.293					4952	27	20.816	4.355	5024	12	22.504	12.817
4752*	29	10.978	11.470	4824	8	5.486	18.114					4953	21	23.722	4.784	5025	13	24.186	12.543
4753	13	11.690	11.148	4825	8	8.486	18.730					4954	26	5.268	5.530	5026	19	24.568	12.780
4754	15	13.442	11.590	4826	14	12.014	18.876					4955	20	5.647	5.099	5027	11	6.046	13.324
4755	17	13.890	11.195	4827	10	15.350	18.932					4956	9	9.807	5.554	5028	8	7.680	13.310
4756	18	14.377	11.903	4828	9	17.628	18.698					4957	15	10.164	5.790	5029	11	8.384	13.116
4757*	38	14.400	11.429	4829	13	19.603	18.054					4958	12	10.174	5.374	5030	9	11.778	13.171
4758	21	18.966	11.303	4830	32	25.205	18.351					4959	10	11.129	5.752	5031	16	14.350	13.900
4759	11	20.424	11.387	4831	14	2.683	19.902					4960*	41	11.820	5.028	5032	14	14.633	13.780
4760	9	23.447	11.075	4832	8	6.215	19.382					4961	22	15.056	5.602	5033	12	15.134	13.394
4761	12	6.230	12.218	4833	17	8.527	19.500					4962	21	16.199	5.610	5034	14	19.272	13.922
4762	11	6.774	12.548	4834	12	12.456	19.826					4963	22	24.756	5.321	5035	22	23.010	13.269
4763	16	12.130	12.392	4835	12	13.610	19.380					4964	15	3.418	6.058	5036	21	0.174	14.186
4764	12	12.690	12.758	4836	19	16.742	19.196					4965	12	4.876	6.044	5037	20	2.485	14.710
4765	24	15.289	12.262	4837	19	20.588	19.608					4966	10	5.620	6.198	5038	17	2.588	14.832
4766	12	17.225	12.024	4838	10	21.438	19.064					4967	12	9.084	6.850	5039	10	2.710	14.562
4767	13	18.244	12.360	4839	13	23.964	19.562					4968	10	9.865	6.669	5040	42	2.766	14.046
4768	19	25.745	12.364	4840	28	25.902	19.140					4969	11	14.344	6.288	5041	8	6.278	14.482
4769	20	4.963	13.812	4841*	47	0.896	20.524					4970	29	21.799	6.035	5042	14	6.678	14.443
4770	14	7.496	13.488	4842	12	10.183	20.651					4971	16	23.076	6.766	5043*	106	10.820	14.894
4771	12	8.457	13.823	4843	26	11.016	20.943					4972	27	24.150	6.914	5044	12	11.320	14.698
4772	24	10.401	13.650	4844	9	12.159	20.528					4973	47	0.190	7.956	5045	13	12.408	14.324
4773	14	13.203	13.790	4845	12	14.714	20.044					4974	11	0.446	7.168	5046	11	13.412	14.290
4774*	40	15.955	13.339	4846	14	15.843	20.856					4975	41	1.846	7.389	5047	19	13.496	14.462
4775	18	17.536	13.612	4847	20	19.311	20.005					4976	12	3.960	7.538	5048	16	14.134	14.125
4776	14	18.569	13.651	4848*	32	21.558	20.768					4977	16	5.742	7.407	5049	12	15.254	14.338
4777	10	18.723	13.018	4849*	29	21.941	20.790					4978	22	7.934	7.502	5050	9	16.542	14.484
4778	25	18.839	13.960	4850*	51	22.766	20.892					4979	13	14.782	7.716	5051	23	16.900	14.492
4779	32	24.922	13.922	4851	16	7.737	21.336					4980	10	18.548	7.270	5052	27	17.730	14.666
4780	26	0.196	14.393	4852	11	8.706	21.080					4981	19	21.798	7.374	5053	11	17.971	14.035
4781	9	4.404	14.738	4853	11	10.816	21.615					4982	10	24.340	7.633	5054	13	18.640	14.117
4782*	39	11.830	14.788	4854	17	0.800	22.182					4983	21	24.671	7.573	5055	15	21.748	14.232
4783	16	18.262	14.603	4855*	49	5.498	22.267					4984	17	3.712	8.923	5056	15	24.784	14.441
4784	31	21.834	14.380	4856	12	5.551	22.120					4985*	48	4.234	8.234	5057	35	0.122	15.056
4785*	31	22.266	14.895	4857	12	12.144	22.946					4986	27	5.399	8.167	5058	11	3.420	15.026
4786	18	22.328	14.026	4858	8	12.640	22.442					4987	10	10.936	8.494	5059	9	8.366	15.674
4787	16	24.630	14.582	4859	26	13.370	22.950					4988	13	14.222	8.247	5060	13	13.517	15.292
4788	13	24.730	14.706	4860	14	13.396	22.571					4989	18	16.070	8.842	5061	18	14.850	15.910
4789	16	1.194	15.044	4861	37	16.082	22.378					4990	37	19.279	8.174	5062	12	16.780	15.717
4790*	40	3.476	15.532	4862	10	16.206	22.222					4991	11	0.012	9.920	5063	12	20.710	15.740
4791	10	6.064	15.274	4863	14	17.702	22.792					4992*	50	4.161	9.700	5064	17	22.543	15.959
4792	8	7.884	15.800	4864	8	18.200	22.764					4993	10	8.874	9.257	5065	29	0.126	16.246
4793	18	12.612	15.276	4865	8	18.945	22.067					4994	10	22.410	9.311	5066	42	0.456	16.558
4794	11	21.064	15.686	4866	30	0.548	23.546					4995	14	1.558	10.088	5067	12	7.044	16.960
4795	23	0.278	16.384	4867	31	7.633	23.966					4996	21	8.062	10.300	5068	11	9.440	16.760
4796*	78	2.898	16.589	4868	9	7.977	23.289					4997	11	8.782	10.860	5069	8	12.890	16.842
4797	11	8.150	16.019	4869	12	13.140	23.039					4998	11	12.214	10.399	5070	11	15.193	16.123
4798	13	8.522	16.402	4870	22	13.262	23.952				</								



5074	22	25.259	16.659	5146	30	10.180	24.950	5238	12	8.703	7.674	5310	26	23.286	14.756	5382	8	5.200	25.140
5075	21	0.176	17.900	5147	10	16.356	24.361	5239	22	9.041	7.424	5311	35	25.568	14.216	5383	50	12.037	25.349
5076*	47	6.353	17.570	5148	13	19.190	24.704	5240	25	9.700	7.804	5312	15	5.986	15.810	5384	13	15.575	25.431
5077	36	6.360	17.582	5149	23	3.924	25.417	5241	22	11.530	7.096	5313*	53	6.726	15.334	5385	32	18.959	25.446
5078	13	6.514	17.602	5150	11	4.835	25.002	5242	18	12.226	7.975	5314	26	14.350	15.524	5386	40	22.554	25.114
5079	14	14.927	17.510	5151	10	4.850	25.220	5243*	35	13.350	7.505	5315	15	0.519	16.113	5387	10	24.042	25.714
5080	14	18.923	17.640	5152	30	6.268	25.415	5244	10	15.592	7.985	5316	16	1.836	16.544				
5081*	49	19.086	17.779	5153	10	10.112	25.320	5245	9	18.969	7.427	5317	29	2.429	16.770				
5082	13	19.435	17.198	5154*	40	12.838	25.070	5246	10	4.630	8.504	5318	23	3.244	16.782				
5083	14	21.156	17.226	5155	27	16.300	25.166	5247	32	6.258	8.718	5319	10	4.064	16.712				
5084	22	23.880	17.506	5156	21	20.720	25.769	5248	24	8.716	8.680	5320	25	6.560	16.470				
5085	10	25.760	17.084					5249	21	10.083	8.118	5321	30	10.360	16.614				
5086	28	3.014	18.096					5250	8	11.709	8.966	5322	11	10.480	16.060				
5087	37	3.110	18.470					5251	18	12.976	8.700	5323	11	16.356	16.956				
5088	15	5.926	18.855					5252	10	13.697	8.460	5324	36	16.534	16.908				
5089	30	11.363	18.884					5253	10	17.414	8.398	5325	14	19.415	16.455				
5090	20	15.910	18.696					5254	11	24.570	8.704	5326	23	1.876	17.644				
5091	8	18.860	18.418					5255	22	10.584	9.672	5327	10	3.752	17.200				
5092	10	19.185	18.438					5256	26	12.358	9.052	5328	22	7.944	17.838				
5093	10	20.712	18.416					5257*	52	13.340	9.230	5329	16	13.066	17.204				
5094	14	1.888	19.700					5258	17	14.720	9.698	5330	11	14.390	17.664				
5095	10	2.454	19.532					5259	26	17.873	9.594	5331	17	18.750	17.789				
5096*	41	3.822	19.250					5260	20	18.494	9.300	5332*	40	18.848	17.438				
5097	20	5.724	19.004					5261	49	25.579	9.537	5333	24	4.616	18.324				
5098	28	6.710	19.550					5262*	50	1.394	10.554	5334	16	6.914	18.395				
5099	10	7.590	19.436					5263*	53	6.155	10.082	5335	20	7.016	18.338				
5100	20	8.914	19.655					5264	17	8.050	10.944	5336	17	7.164	18.598				
5101	12	10.730	19.050					5265	17	12.184	10.259	5337	29	7.959	18.574				
5102	12	11.221	19.707					5266*	60	19.315	10.187	5338	28	21.242	18.519				
5103	14	11.753	19.036					5267	8	19.685	10.442	5339	11	23.118	18.058				
5104	27	13.830	19.811					5268	10	21.815	10.882	5340	15	25.783	18.732				
5105	12	15.994	19.950					5269*	42	22.022	10.375	5341	34	1.420	19.940				
5106	10	17.595	19.496					5270	9	25.508	10.519	5342	32	2.194	19.584				
5107	10	20.614	19.460					5271	27	0.546	11.109	5343	11	11.932	19.905				
5108	11	20.776	19.739					5272*	39	3.200	11.578	5344	20	12.896	19.432				
5109	29	23.399	19.800					5273	9	5.440	11.952	5345	28	16.984	19.656				
5110	33	24.174	19.450					5274	10	9.132	11.645	5346	30	17.624	19.388				
5111	11	25.570	19.324					5275	25	9.487	11.806	5347	10	17.665	19.106				
5112	8	4.786	20.324					5276	13	10.765	11.077	5348	10	19.908	19.826				
5113	17	6.925	20.306					5277	10	24.726	11.324	5349	12	24.630	19.812				
5114	22	14.594	20.724					5278	10	0.445	12.973	5350*	49	25.233	19.400				
5115	10	14.822	20.780					5279	10	2.124	12.678	5351	21	5.956	20.584				
5116*	41	19.280	20.340					5280	22	2.510	12.910	5352	22	6.914	20.866				
5117*	68	0.703	21.045					5281	9	3.912	12.956	5353	13	10.614	20.040				
5118	22	9.644	21.024					5282	35	7.095	12.908	5354	29	11.108	20.318				
5119	12	11.711	21.320					5283*	34	8.088	12.367	5355	14	14.039	20.955				
5120	25	12.832	21.634					5284*	35	8.956	12.353	5356	16	17.916	20.060				
5121*	43	16.710	21.274					5285	23	9.502	12.174	5357	12	21.746	20.384				
5122	17	19.822	21.786					5286	19	11.219	12.904	5358*	52	22.160	20.114				
5123	11	2.709	22.067					5287*	43	13.338	12.442	5359	13	5.168	21.525				
5124	14	5.061	22.378					5288	12	16.372	12.748	5360	21	5.490	21.908				
5125	21	6.236	22.424					5289	29	20.517	12.625	5361	10	7.622	21.376				
5126	16	6.550	22.505					5290	26	22.124	12.546	5362	26	13.858	21.832				
5127	19	6.600	22.694					5291	14	22.334	12.176	5363	24	19.700	21.302				
5128	9	9.354	22.320					5292	17	22.572	12.895	5364	8	15.794	21.615				
5129	8	10.626	22.442					5293	27	0.955	13.418	5365	12	17.080	21.946				
5130	16	16.752	22.646					5294	11	5.380	13.138	5366	20	17.492	21.905				
5131	25	18.974	22.834					5295*	42	9.300	13.009	5367*	67	19.016	21.544				
5132	17	20.174	22.049					5296	10	14.434	13.524	5368	20	23.468	21.470				
5133	10	21.814	22.936					5297	10	14.852	13.054	5369	8	7.476	22.264				
5134	23	21.844	22.024					5298*	35	16.082	13.239	5370*	66	15.606	22.986				
5135	17	1.706	23.740					5299	36	18.778	13.074	5371*	39	16.949	22.838				
5136	16	8.328	23.242					5300	11	24.068	13.952	5372	10	19.612	22.807				
5537	23	13.976	23.590					5301	17	2.746	14.571	5373	36	8.650	23.119				
5138	10	19.260	23.658					5302	9	6.480	14.828	5374	23	8.674	23.326				
5139	14	20.506	23.126					5303	20	8.130	14.412	5375	12	9.066	23.035				
5140	25	0.884	24.328					5304	36	8.870	14.404	5376	8	13.095	23.254				
5141	22	1.270	24.246					5305	29	9.250	14.960	5377*	40	17.020	23.782				
5142	22	3.195	24.182					5306	12	12.492	14.277	5378	12	25.056	23.976				
5143	20	5.273	24.044					5307	30	15.208	14.274	5379	8	25.412	23.165				
5144	11	5.489	24.892					5308	20	17.762	14.188	5380	34	4.364	25.458				
5145	30	8.992	24.036					5309	22	21.266	14.950	5381	11	5.134	25.580				

R.A. 3<sup>h</sup> 24<sup>m</sup>

Plate 899; 1916 Dec. 15.

Provisional Constants.

A B C  
-02567 +00613 +2422

D E F  
-00627 -02596 -1216

Mag. = 16.6 - 1.09√d

R.A. 3<sup>h</sup> 32<sup>m</sup>

Plate 875; 1916 Nov. 30.

Provisional Constants.

A B C  
-02548 +00420 +1512

D E F  
-00435 -02574 -2873

Mag. = 16.8 - 1.09√d

No.	d	x	y
5401	14	2.526	0.204
5402	8	7.672	0.182
5403	12	9.394	0.578
5404*	41	16.783	0.489
5405	15	21.234	0.742
5406	11	3.700	1.280
5407	19	5.710	1.670
5408	18	6.732	1.682
5409	12	7.293	1.314
5410	13	9.220	1.888
5411	23	25.078	1.624
5412	10	0.228	2.245
5413	13	4.615	2.286
5414	8	5.032	2.121
5415	9	8.952	2.043
5416	17	11.333	2.842
5417	20	14.167	2.061
5418	8	15.574	2.528
5419	9	16.546	2.479
5420	11	21.838	2.513
5421	10	23.376	2.968
5422	10	13.625	3.618
5423*	36	13.866	3.038
5424*	54	14.575	3.039
5425	11	14.756	3.827
5426	31	18.550	3.712
5427	8	18.769	3.614
5428	15	19.489	3.545
5429	14	25.418	3.567
5430	36	25.728	3.130
5431	12	2.702	4.296
5432	8	7.283	4.104
5433	29	9.084	4.360
5434	10	12.797	4.115
5435	36	13.886	4.224
5436	12	14.084	4.913
5437	14	19.650	4.604
5438	16	20.586	4.324
5439	14	13.292	5.089
5440	9	16.393	5.464
5441	24	16.396	5.607
5442	10	19.598	5.086



5443	9	24.275	5.154	5515	9	25.736	13.094	5587	18	24.902	20.718	5655	9	22.081	0.804	5727	14	8.762	11.527
5444	15	25.104	5.424	5516	12	25.756	13.723	5588	43	25.951	20.673	5656	32	23.286	0.144	5728	10	1.240	12.597
5445	25	4.437	6.292	5517	24	1.076	14.740	5589	16	1.324	21.450	5657	27	2.836	1.889	5729	32	5.156	12.820
5446	26	9.433	6.916	5518	30	3.353	14.180	5590	20	5.761	21.274	5658	13	3.313	1.274	5730	32	7.620	12.766
5447	15	9.474	6.484	5519	10	4.367	14.898	5591	9	9.890	21.056	5659	35	5.506	1.313	5731	29	7.999	12.298
5448	28	11.872	6.722	5520	19	9.331	14.027	5592	10	10.147	21.502	5660	32	5.864	1.620	5732*	73	8.016	12.918
5449	25	15.075	6.495	5521	14	15.288	14.554	5593	31	20.614	21.646	5661	33	10.128	1.355	5733	25	8.572	12.676
5450	26	15.156	6.966	5522	20	15.473	14.918	5594	9	23.402	21.360	5662	33	24.422	1.516	5734	8	8.878	12.186
5451	27	15.207	6.062	5523	13	25.402	14.706	5595*	51	24.078	21.042	5663	10	12.845	2.463	5735	10	9.356	12.748
5452	19	21.676	6.498	5524	10	1.862	15.850	5596	78	24.439	21.644	5664	14	13.399	2.218	5736	11	11.658	12.119
5453	12	14.550	7.051	5525	22	5.126	15.436	5597	32	25.992	21.458	5665	27	16.726	2.172	5737	9	12.610	12.828
5454	13	19.154	7.426	5526	13	5.658	15.622	5598	26	4.114	22.607	5666	20	24.978	2.592	5738	26	14.440	12.370
5455	12	19.957	7.551	5527	13	5.966	15.100	5599	9	8.652	22.176	5667	10	1.148	3.251	5739	26	19.199	12.574
5456	15	2.304	8.677	5528	9	8.754	15.700	5600	10	10.434	22.370	5668	21	3.196	3.829	5740	9	22.634	12.042
5457	16	3.878	8.712	5529	12	11.702	15.160	5601	13	12.173	22.120	5669*	39	3.500	3.388	5741	28	0.202	13.648
5458	8	15.026	8.750	5530	12	14.791	15.738	5602*	8	19.876	22.046	5670	10	7.030	3.301	5742	12	3.614	13.355
5459	17	20.490	8.862	5531	9	15.450	15.834	5603	16	2.936	23.944	5671	16	16.108	3.364	5743	14	3.636	13.984
5460	19	21.240	8.410	5532	20	15.771	15.516	5604	10	5.604	23.078	5672	35	17.494	3.380	5744	22	10.356	13.401
5461*	49	3.318	9.500	5533	18	15.854	15.394	5605	30	6.312	23.508	5673	34	17.772	3.104	5745	16	13.596	13.466
5462	16	7.216	9.882	5534	12	17.604	15.963	5606	23	8.366	23.190	5674	33	20.732	3.451	5746	19	17.280	13.844
5463	18	7.773	9.372	5535	33	23.026	15.512	5607	38	10.646	23.152	5675	26	6.070	4.576	5747	19	18.084	13.010
5464	15	8.992	9.424	5536	11	5.568	16.493	5608	10	11.976	23.732	5676	19	6.194	4.021	5748*	35	20.335	13.878
5465	12	10.668	9.127	5537	9	11.774	16.072	5609	9	14.194	23.839	5677	37	10.584	4.595	5749	12	20.950	13.634
5466	9	16.587	9.778	5538	8	13.096	16.600	5610	9	14.536	23.120	5678	30	13.778	4.304	5750	10	22.300	13.252
5467	19	17.055	9.129	5539	30	14.198	16.518	5611	19	15.124	23.675	5679	25	14.624	4.560	5751	8	23.286	13.214
5468	20	20.760	9.336	5540*	55	21.208	16.110	5612	8	18.254	23.322	5680	24	19.365	4.449	5752	16	3.295	14.971
5469	11	22.544	9.822	5541	13	2.263	17.010	5613	12	18.719	23.157	5681	14	20.772	4.706	5753*	38	7.845	14.130
5470	15	23.156	9.598	5542	12	3.437	17.186	5614*	73	23.200	23.052	5682	30	21.256	4.608	5754	13	11.716	14.736
5471	36	25.058	9.030	5543*	42	4.852	17.092	5615	10	24.676	23.098	5683	16	22.696	4.852	5755	23	13.098	14.468
5472	13	1.874	10.810	5544	30	4.973	17.084	5616	12	1.809	24.862	5684	48	25.864	4.070	5756	26	14.604	14.785
5473	14	3.260	10.483	5545	9	6.162	17.214	5617	31	6.733	24.064	5685	9	2.067	5.430	5757	16	18.913	14.872
5474	9	3.633	10.727	5546	9	8.190	17.301	6518	11	7.272	24.098	5686	25	2.900	5.692	5758	18	19.068	14.540
5475	9	4.252	10.398	5547	10	14.432	17.639	5619	38	10.799	24.458	5687	10	5.141	5.390	5759	21	19.554	14.602
5476	24	7.941	10.290	5548	36	16.790	17.467	5620	14	14.952	24.432	5688	16	8.870	5.649	5760	35	0.974	15.800
5477	8	9.014	10.913	5549	16	18.342	17.674	5621	12	15.717	24.410	5689	14	10.474	5.837	5761	9	5.086	15.872
5478	27	10.266	10.252	5550	16	24.842	17.256	5622	18	16.126	24.792	5690	20	10.969	5.360	5762*	36	16.450	15.852
5479*	64	12.032	10.938	5551	11	24.988	17.646	5623	13	16.854	24.072	5691*	38	14.305	5.274	5763*	36	18.299	15.391
5480	30	12.454	10.453	5552	10	25.994	17.951	5624	11	19.382	24.118	5692	18	19.719	5.814	5764	21	18.686	15.278
5481	14	23.253	10.186	5553	12	0.786	18.806	5625	38	0.444	25.107	5693	9	25.384	5.497	5765	20	20.112	15.439
5482	15	2.488	11.294	5554	12	0.938	18.041	5626	14	1.942	25.694	5694	10	7.190	6.310	5766	30	23.546	15.235
5483	11	8.776	11.864	5555	10	0.996	18.164	5627	12	3.786	25.124	5695	8	15.445	6.328	5767	14	24.840	15.952
5484	9	9.410	11.841	5556	10	3.264	18.243	5628	13	4.150	25.227	5696	10	20.300	6.966	5768	14	25.532	15.936
5485	18	11.186	11.230	5557	22	3.610	18.692	5629	11	8.724	25.056	5697	23	24.305	6.871	5769	8	3.284	16.906
5486	11	12.198	11.807	5558	8	6.347	18.793	5630	36	16.969	25.006	5698	13	6.694	7.470	5770	17	4.524	16.578
5487	12	15.294	11.026	5559	12	8.334	18.305					5699*	37	12.976	7.924	5771*	40	6.530	16.306
5488	18	17.470	11.696	5560	12	12.846	18.593					5700	11	19.420	7.715	5772	18	9.646	16.022
5489	14	0.100	12.168	5561	8	14.034	18.028					5701	12	25.372	7.761	5773	28	11.280	16.748
5490	15	0.342	12.884	5562	15	14.138	18.022					5702	14	7.018	8.588	5774	11	11.560	16.047
5491	12	2.942	12.961	5563	27	14.606	18.332					5703*	38	9.765	8.518	5775	11	13.706	16.508
5492	22	8.854	12.639	5564	12	18.256	18.640					5704	25	12.293	8.506	5776	21	17.409	16.748
5493	36	8.876	12.626	5565	21	19.186	18.008					5705	10	15.698	8.733	5777	32	17.845	16.794
5494	12	14.752	12.678	5566	10	19.934	18.699					5706	11	18.180	8.011	5778	26	23.762	16.548
5495	12	17.486	12.528	5567	17	24.822	18.172					5707	15	19.795	8.883	5779	10	24.176	16.542
5496	9	18.701	12.600	5568	20	2.468	19.782					5708	33	23.203	8.130	5780	13	25.459	16.782
5497	11	19.996	12.654	5569*	44	3.064	19.366					5709*	13	0.996	9.884	5781	32	25.532	16.208
5498	8	21.752	12.130	5570	8	3.818	19.276					5710*	34	2.886	9.297	5782	22	2.760	17.524
5499	10	23.374	12.312	5571	35	4.441	19.682					5711	24	4.108	9.828	5783	11	2.912	17.914
5500	14	1.848	13.928	5572	12	15.144	19.213					5712	35	4.640	9.640	5784*	66	11.255	17.582
5501	10	2.482	13.468	5573	21	16.962	19.891					5713	12	12.554	9.840	5785	10	12.850	17.591
5502	14	3.720	13.090	5574	9	17.780	19.980					5714	9	18.734	9.963	5786*	45	14.411	17.775
5503	9	4.484	13.492	5575	14	19.304	19.280					5715	9	25.615	9.796	5787*	36	15.072	17.860
5504	8	5.812	13.589	5576	9	23.074	19.868					5716	9	0.384	10.118	5788	17	16.438	17.044
5505	8	7.036	13.154	5577	45	0.000	20.108					5717	13	1.096	10.474	5789	12	17.358	17.238
5506	8	9.401	13.302	5578	11	10.175	20.003					5718	9	3.074	10.436	5790	10	17.776	17.210
5507	10	10.432	13.145	5579	16	12.036	20.476					5719	11	4.382	10.351	5791*	41	20.181	17.912
5508	10	11.710	13.759	5580*	79	12.716	20.620					5720	23	5.206	10.722	5792	14	21.816	17.976
5509	11	14.083	13.464	5581	9	13.755	20.905					5721	28						



5799	10	25.525	18.380	<div>R.A. 3<sup>h</sup> 48<sup>m</sup></div> <div>Plate 853; 1916 Nov. 27.</div> <div>Provisional Constants.</div> <div>A            B            C</div> <div>−02546 +00244 −5606</div> <div>D            E            F</div> <div>−00262 −02572 +0284</div> <div>Mag.=17.0−1.09√<i>d</i></div>	5956*	56	17.639	5.246	6028	34	19.525	12.360	6100	20	22.236	18.464
5800	19	25.670	18.430		5957	33	20.700	5.005	6029	19	22.970	12.408	6101	18	24.684	18.905
5801	25	10.964	19.052		5958	14	5.134	6.184	6030	36	24.041	12.495	6102	34	25.953	18.626
5802	22	0.225	20.506		5959	36	8.126	6.164	6031	16	24.751	12.654	6103*	42	14.414	19.508
5803	12	1.022	20.156		5960	19	10.564	6.794	6032*	88	5.936	13.273	6104	16	14.515	19.114
5804	14	1.434	20.521		5961*	48	13.136	6.702	6033	15	6.538	13.220	6105	36	16.124	19.096
5805	29	1.576	20.417		5962	24	17.184	6.656	6034	34	7.676	13.174	6106	11	18.226	19.886
5806	20	2.860	20.985		5963	18	18.237	6.596	6035	23	12.294	13.216	6107	17	18.956	19.024
5807*	43	3.900	20.928		5964	10	20.876	6.774	6036	36	15.635	13.826	6108	10	20.256	19.684
5808	23	12.421	20.870		5965	16	22.277	6.268	6037	23	18.150	13.524	6109	17	20.569	19.816
5809	31	13.460	20.834	5966	12	22.422	6.960	6038	21	20.686	13.662	6110	21	22.364	19.134	
5810	19	13.963	20.156	5967	12	23.866	6.508	6039	17	24.848	13.191	6111	13	22.840	19.676	
5811	13	14.496	20.836	5968	18	24.412	6.185	6040	26	6.899	14.909	6112	36	24.845	19.184	
5812	15	15.224	20.551	5969	29	1.418	7.066	6041	14	8.312	14.724	6113	16	2.808	20.914	
5813	11	18.264	20.992	5970	17	2.496	7.944	6042	22	8.550	14.252	6114	23	4.574	20.263	
5814	10	23.404	20.800	5971	14	5.648	7.816	6043	12	8.892	14.984	6115	32	4.784	20.382	
5815	18	25.546	20.733	5972	12	8.588	7.784	6044	17	9.266	14.207	6116	18	5.974	20.525	
5816	10	1.366	21.648	5973	17	8.658	7.914	6045	11	16.286	14.791	6117	12	9.605	20.466	
5817*	47	2.032	21.318	5974	17	9.786	7.990	6046	14	19.046	14.354	6118	10	10.046	20.049	
5818*	68	2.400	21.917	5975	13	11.183	7.554	6047	19	24.740	14.686	6119	16	13.854	20.406	
5819	39	3.952	21.714	5976	27	12.586	7.997	6048	23	0.746	15.438	6120*	42	17.951	20.634	
5820	10	9.224	21.840	5977	11	14.706	7.324	6049	11	4.660	15.988	6121	15	19.814	20.099	
5821	30	16.796	21.422	5978	19	17.135	7.166	6050*	62	8.644	15.164	6122	15	23.976	20.838	
5822	10	18.975	21.848	5979*	36	17.184	7.228	6051	42	8.686	15.151	6123	16	24.654	20.978	
5823	17	22.048	21.060	5980	22	23.628	7.152	6052	14	9.784	15.458	6124	42	25.503	20.824	
5824	20	25.280	21.400	5981	36	0.325	8.336	6053	24	11.313	15.774	6125	21	2.542	21.586	
5825	13	8.683	22.542	5982	11	2.764	8.912	6054	30	15.274	15.166	6126	24	8.662	21.916	
5826	13	11.995	22.860	5983*	56	3.853	8.025	6055	15	19.343	15.224	6127	18	9.757	21.324	
5827	27	14.038	22.021	5984	12	10.626	8.944	6056	13	19.614	15.532	6128*	42	20.844	21.722	
5828	11	14.153	22.247	5985	26	11.192	8.019	6057	24	22.094	15.924	6129*	57	21.335	21.164	
5829	23	14.198	22.040	5986	13	13.412	8.036	6058	17	23.811	15.624	6130	37	23.046	21.775	
5830	23	14.804	22.692	5987	30	19.894	8.437	6059	27	0.974	16.748	6131	20	3.696	22.556	
5831	34	18.114	22.802	5988	26	21.503	8.343	6060	14	1.392	16.739	6132	14	16.657	22.826	
5832	11	20.692	22.434	5989	10	2.765	9.978	6061	14	2.048	16.142	6133	18	17.834	22.549	
5833	10	22.274	22.922	5990	19	3.622	9.085	6062	15	2.678	16.965	6134	9	20.530	22.954	
5834*	68	1.174	23.338	5991*	44	24.280	1.292	6063*	33	2.742	16.392	6135*	50	22.673	22.856	
5835	18	2.660	23.370	5992	12	24.871	1.296	6064	17	2.744	16.120	6136	11	24.524	22.626	
5836*	86	4.385	23.180	5993	17	0.348	2.014	6065	16	9.143	16.621	6137	37	25.206	22.168	
5837	31	6.063	23.802	5994	20	2.054	2.779	6066	14	9.671	16.896	6138	21	5.394	23.824	
5838	22	10.692	23.582	5995	13	4.332	2.028	6067	18	9.714	16.782	6139	23	5.418	23.257	
5839	17	13.244	23.095	5996	50	10.198	2.264	6068	21	12.922	16.673	6140	13	5.799	23.436	
5840	29	13.450	23.934	5997*	19	15.610	2.157	6069	26	14.526	16.214	6141	34	6.128	23.900	
5841	16	16.489	23.479	5998	23	17.881	2.852	6070	13	15.214	16.904	6142	18	8.124	23.749	
5842	27	19.463	23.682	5999	24	18.653	2.063	6071	20	15.503	16.634	6143	27	8.514	23.734	
5843	11	20.551	23.849	6000	56	3.454	3.912	6072	18	19.246	16.856	6144	11	12.742	23.554	
5844	37	21.156	23.234	6001	15	7.006	3.677	6073	18	20.784	16.534	6145	24	13.206	23.000	
5845	21	22.166	23.146	6002	13	11.046	3.218	6074	23	21.716	16.510	6146	19	18.374	23.713	
5846	30	22.503	23.066	6003	19	12.171	3.366	6075	32	21.962	16.961	6147	11	20.579	23.706	
5847*	46	22.798	23.888	6004	27	15.366	3.021	6076	34	8.218	17.505	6148	24	22.836	23.076	
5848	31	5.554	24.688	6005	16	15.976	3.415	6077	8	9.416	17.122	6149*	56	0.084	24.100	
5849	15	6.529	24.910	6006	23	18.400	3.996	6078	18	10.562	17.974	6150*	50	4.451	24.437	
5850	13	7.654	24.250	6007	15	18.660	3.453	6079	12	14.480	17.550	6151	11	4.766	24.949	
5851	30	9.074	24.208	6008	10	18.812	3.711	6080	13	15.801	17.052	6152	20	6.085	24.220	
5852	11	13.368	24.069	6009	24	19.652	3.424	6081	32	16.954	17.106	6153	31	6.478	24.346	
5853	11	16.010	24.396	6010	40	19.942	3.923	6082	19	19.374	17.677	6154	36	7.226	24.964	
5854	11	17.514	24.837	6011	38	22.364	3.986	6083	15	19.754	17.784	6155	23	8.552	24.308	
5855	31	17.558	24.448	6012*	58	2.941	4.252	6084	14	19.850	17.130	6156	14	13.236	24.320	
5856	11	22.300	24.294	6013	15	9.234	4.835	6085	24	22.472	17.038	6157	28	13.461	24.314	
5857	10	22.565	24.822	6014	22	9.361	4.876	6086	16	2.756	18.563	6158	27	15.608	24.524	
5858	11	7.745	25.996	6015	36	12.026	4.364	6087	16	2.905	18.608	6159	11	15.768	24.622	
5859	14	8.393	25.019	6016	18	13.564	4.084	6088	11	4.668	18.638					



**R.A. 3<sup>h</sup> 56<sup>m</sup>**

Plate 854; 1916 Nov. 27.

*Provisional Constants.*

$$\begin{matrix} A & B & C \\ -.02563 & +.00421 & +.1183 \end{matrix}$$

$$\begin{matrix} D & E & F \\ -.00427 & -.02574 & -.1760 \end{matrix}$$

$$\text{Mag.} = 16.8 - 1.09 \sqrt{d}$$

No.	d	x	y
6201	10	0.376	0.290
6202	11	1.568	0.884
6203*	42	6.940	0.186
6204	12	10.074	0.990
6205	35	10.412	0.860
6206	28	10.736	0.672
6207	42	18.310	0.416
6208	15	18.358	0.616
6209	37	18.834	0.848
6210	10	19.096	0.142
6211	8	20.390	0.304
6212*	43	2.691	1.131
6213	16	5.095	1.516
6214	41	6.786	1.892
6215	13	8.792	1.836
6216	11	11.252	1.063
6217	31	20.984	1.114
6218	23	23.574	1.020
6219	17	5.440	2.073
6220	8	9.082	2.122
6221	23	9.098	2.743
6222	8	12.957	2.839
6223	11	13.325	2.484
6224	35	18.200	2.500
6225	30	18.366	2.841
6226	17	21.608	2.135
6227	33	0.805	3.851
6228	34	5.832	3.709
6229*	40	7.308	3.400
6230*	51	10.793	3.055
6231	26	11.492	3.441
6232	9	12.826	3.966
6233	26	16.489	3.239
6234	10	19.264	3.151
6235	8	22.644	3.492
6236*	43	25.006	3.379
6237	14	6.764	4.094
6238	12	9.789	4.798
6239	18	12.326	4.376
6240*	40	15.450	4.116
6241*	42	15.614	4.228
6242	9	16.516	4.490
6243	39	16.911	4.998
6244	32	6.036	5.202
6245	10	7.362	5.966
6246	8	9.908	5.977
6247	9	11.174	5.129
6248	8	11.792	5.294
6249*	38	12.892	5.538
6250	38	13.604	5.867
6251	14	15.477	5.974
6252*	45	16.390	5.566
6253	9	16.725	5.076
6254	8	16.855	5.476
6255	23	16.942	5.162

6256	23	18.234	5.364	6328	28	5.909	14.669
6257	31	18.874	5.527	6329	11	12.212	14.002
6258*	44	22.336	5.590	6330	26	17.056	14.864
6259	45	23.100	5.807	6331	11	17.698	14.096
6260	13	0.754	6.136	6332	10	19.725	14.024
6261	17	2.114	6.996	6333	9	21.739	14.416
6262	17	2.884	6.025	6334	8	25.574	14.708
6263*	42	5.322	6.410	6335	40	0.691	15.789
6264*	42	6.125	6.161	6336	29	2.403	15.464
6265	12	6.996	6.134	6337	14	4.908	15.220
6266	24	8.868	6.052	6338	30	8.275	15.835
6267	15	10.844	6.763	6339*	43	9.166	15.116
6268	18	12.664	6.160	6340	12	19.276	15.624
6269	36	14.664	6.996	6341	10	20.866	15.376
6270	40	5.724	7.462	6342	12	22.014	15.732
6271	12	6.256	7.632	6343	39	0.318	16.378
6272	17	12.494	7.875	6344	40	0.570	16.825
6273	18	13.838	7.689	6345	10	1.082	16.898
6274	37	17.838	7.719	6346	18	5.182	16.799
6275	38	20.162	7.642	6347	8	5.194	16.414
6276*	43	21.871	7.396	6348	10	6.672	16.086
6277	8	23.826	7.034	6349	10	6.978	16.347
6278	40	23.838	7.442	6350	9	10.046	16.984
6279	22	0.002	8.216	6351	35	18.875	16.964
6280*	35	9.308	8.240	6352*	42	19.033	16.215
6281*	40	9.444	8.350	6353*	41	19.392	16.521
6282	26	14.466	8.978	6354*	35	19.531	16.742
6283*	80	16.586	8.308	6355	8	22.095	16.313
6284	31	19.994	8.902	6356	26	23.222	16.212
6285	31	4.254	9.254	6357	35	5.764	17.896
6286	33	4.716	9.752	6358	38	9.445	17.216
6287	32	7.396	9.166	6359*	39	11.718	17.892
6288	11	7.740	9.540	6360	8	13.601	17.208
6289	10	7.803	9.734	6361	18	14.098	17.911
6290	11	10.496	9.840	6362	14	14.823	17.109
6291	41	13.802	9.534	6363	9	19.727	17.804
6292	28	15.490	9.562	6364	9	20.255	17.393
6293	36	17.965	9.838	6365	8	22.938	17.824
6294	18	22.156	9.232	6366	8	23.987	17.930
6295	13	24.353	9.926	6367	13	0.805	18.420
6296	9	25.583	9.468	6368	22	0.865	18.326
6297	29	1.338	10.708	6369	22	1.004	18.996
6298	8	2.215	10.476	6370	10	3.321	18.734
6299*	49	3.308	10.674	6371	40	4.585	18.441
6300	33	5.776	10.475	6372	13	9.387	18.625
6301	9	6.670	10.386	6373	10	9.906	18.604
6302	10	7.518	10.190	6374	33	10.001	18.360
6303	9	13.344	10.120	6375	16	11.512	18.608
6304	8	15.645	10.855	6376*	86	11.635	18.648
6305*	41	15.962	10.087	6377	11	17.766	18.392
6306	8	17.550	10.180	6378	33	22.100	18.196
6307	11	19.294	10.836	6379	33	25.048	18.558
6308	8	20.759	10.504	6380	8	1.484	19.530
6309	9	20.905	10.256	6381	37	3.483	19.010
6310	10	10.080	11.294	6382	8	4.522	19.956
6311	15	10.391	11.450	6383	18	5.358	19.824
6312	19	14.236	11.622	6384	11	10.951	19.253
6313	14	16.096	11.042	6385	14	15.306	19.970
6314	20	18.894	11.216	6386	35	21.706	19.855
6315	17	1.524	12.264	6387	8	2.638	20.682
6316	41	2.592	12.334	6388	10	3.319	20.813
6317	8	3.305	12.484	6389	40	4.162	20.642
6318	8	9.156	12.892	6390*	42	6.311	20.895
6319	40	24.542	12.100	6391	9	10.926	20.982
6320	8	3.416	13.021	6392	33	11.083	20.334
6321	13	6.074	13.675	6393	24	20.082	20.078
6322	17	9.752	13.776	6394	9	20.820	20.126
6323	40	19.300	13.626	6395	39	1.722	21.627
6324	21	23.800	13.278	6396	38	3.886	21.992
6325	9	23.958	13.001	6397	23	5.694	21.446
6326	40	25.384	13.786	6398	13	6.111	21.610
6327	11	3.323	14.518	6399	16	6.444	21.977

6400	11	10.604	21.488	6454	22	15.480	0.434
6401	13	13.138	21.465	6455	45	15.690	0.642
6402	31	15.416	21.868	6456	21	1.365	1.115
6403	13	15.979	21.774	6457*	53	6.232	1.996
6404	38	16.308	21.704	6458	14	8.984	1.904
6405	11	17.583	21.025	6459	35	10.584	1.504
6406*	62	18.590	21.510	6460	14	10.774	1.634
6407	13	20.251	21.106	6461	11	11.425	1.750
6408*	80	23.524	21.128	6462*	47	19.019	1.278
6409	30	24.566	21.855	6463	12	20.740	1.670
6410	43	25.943	21.500	6464	13	22.170	1.082
6411*	45	1.356	22.716	6465	35	5.090	2.561
6412	15	1.528	22.931	6466*	26	6.374	2.019
6413	9	3.213	22.462	6467	31	11.261	2.104
6414	10	5.934	22.730	6468	26	12.624	2.970
6415	38	8.122	22.112	6469	25	13.038	2.625
6416	37	10.201	22.818	6470	31	13.180	2.032
6417	21	15.914	22.789	6471	9	13.588	2.402
6418	22	17.056	22.520	6472	10	17.520	2.636
6419	8	21.238	22.339	6473	21	19.258	2.076
6420	21	25.290	22.977	6474	12	20.028	2.980
6421	11	5.425	23.682	6475	13	22.194	2.650
6422	9	7.918	23.996	6476	9	22.252	2.522
6423	11	8.400	23.416	6477*	65	22.600	2.319
6424	15	10.112	23.266	6478	11	0.446	3.587
6425	40	14.684	23.296	6479*	51	2.806	3.465
6426	9	19.892	23.606	6480	12	4.335	3.909
6427	25	20.398	23.376	6481	9	5.310	3.690
6428	8	20.432	23.085	6482	30	6.510	3.346
6429	8	22.790	23.413	6483	12	8.469	3.636
6430	24	23.940	23.200	6484*	58	8.549	3.533
6431	8	1.325	24.148	6485*	70	13.799	3.264
6432	8	1.438	24.451	6486	10	18.026	3.795
6433	9	4.193	24.440	6487	9	22.366	3.158
6434	8	4.875	24.921	6488	24	23.944	3.144
6435	15	5.074	24.644	6489	14	24.897	3.002
6436	31	6.861	24.674	6490	15	5.548	4.077
6437	38	10.390	24.326	6491	11	5.645	4.930
6438	8	10.918	24.309	6492*	80	7.643	4.549
6439	10	13.078	24.747	6493	10	9.525	4.294
6440	36	25.116	24.569	6494	26	10.240	4.675
6441	9	25.508	24.234	6495	16	10.405	4.924
6442	10	0.276	25.125	6496	12	11.954	4.652
6443	8	3.105	25.520	6497	37	16.913	4.040
6444	9	10.244	25.919	6498*	49	22.780	4.733
6445	10	12.214	25.428	6499	52	23.898	4.838
6446	10	15.395	25.076	6500	54	0.149	5.692
6447	11	20.536	25.635	6501	50	0.912	5.903



6526	34	25.140	6.564	6598	12	15.174	12.030	6670	24	11.354	18.177	6742	46	20.913	24.903	6839	18	19.289	2.106
6527	13	1.651	7.126	6599*	77	17.170	12.196	6671	11	12.838	18.099	6743	9	1.003	25.426	6840	21	19.756	2.270
6528	46	1.661	7.535	6600	40	21.534	12.038	6672	25	13.662	18.079	6744	12	7.184	25.456	6841	32	4.163	3.210
6529	10	3.133	7.712	6601	13	21.856	12.523	6673*	50	14.210	18.928	6745	39	8.768	25.663	6842	26	8.386	3.419
6530	23	6.012	7.102	6602	26	22.408	12.584	6674	14	16.003	18.680	6746	11	9.087	25.077	6843	26	8.794	3.132
6531	10	8.311	7.732	6603	13	23.831	12.798	6675*	82	16.800	18.940	6747	14	11.259	25.416	6844	12	9.564	3.402
6532	14	9.268	7.041	6604	11	24.562	12.536	6676	10	17.874	18.811	6748	13	12.542	25.662	6845	11	10.004	3.331
6533	13	9.533	7.175	6605	11	25.264	12.186	6677	14	18.590	18.736	6749	27	17.364	25.924	6846	27	15.426	3.701
6534	11	10.550	7.490	6606	23	1.662	13.370	6678	15	21.189	18.131	6750	11	21.730	25.428	6847	26	21.726	3.333
6535	20	10.743	7.456	6607	10	1.820	13.092	6679	28	24.342	18.394	6751	73	25.454	25.552	6848*	38	0.640	4.513
6536	24	11.777	7.090	6608	37	3.248	13.871	6680	10	1.351	19.539					6849	40	1.760	4.602
6537	9	15.335	7.113	6609	16	4.646	13.436	6681	37	6.332	19.094					6850	8	3.058	4.576
6538*	58	23.490	7.690	6610	8	5.458	13.856	6682*	43	8.556	19.116					6851	8	4.636	4.662
6539	21	24.777	7.130	6611	10	7.821	13.222	6683	10	10.140	19.000					6852*	47	5.428	4.193
6540	18	4.650	8.005	6612	10	8.690	13.828	6684	13	13.186	19.484					6853	39	7.186	4.050
6541	11	4.650	8.088	6613	16	9.973	13.048	6685	25	13.247	19.604					6854	13	9.974	4.074
6542	13	5.353	8.162	6614	14	14.362	13.249	6686	12	21.392	19.402					6855*	39	10.504	4.124
6543	30	8.418	8.077	6615	15	14.370	13.426	6687	41	23.172	19.442					6856	9	10.821	4.374
6544	12	13.211	8.238	6616	32	17.136	13.640	6688	13	23.257	19.736					6857	8	10.840	4.557
6545	18	15.025	8.033	6617	9	19.071	13.286	6689	16	23.900	19.633					6858	38	15.206	4.494
6546*	67	20.099	8.852	6618	10	22.080	13.962	6690	11	2.320	20.658					6859	31	17.575	4.406
6547	45	20.112	8.855	6619	13	3.445	14.788	6691	9	3.425	20.044					6860	16	20.971	4.496
6548	16	20.516	8.466	6620	12	5.442	14.348	6692	10	7.255	20.814					6861	31	22.626	4.582
6549	10	20.714	8.714	6621	26	6.660	14.058	6693	45	9.872	20.412					6862	9	24.695	4.478
6550	15	20.733	8.872	6622	27	16.057	14.127	6694	11	11.933	20.470					6863	8	4.052	5.251
6551	12	22.470	8.081	6623	8	16.070	14.098	6695*	45	12.584	20.442					6864	8	6.192	5.966
6552	10	23.280	8.578	6624	10	16.246	14.833	6696	8	12.670	20.938					6865	22	6.317	5.148
6553	16	24.485	8.974	6625	10	20.352	14.590	6697	23	14.840	20.930					6866	38	6.554	5.976
6554	14	3.424	9.547	6626	11	23.410	14.408	6698	11	15.228	20.642					6867	15	14.225	5.595
6555	10	4.981	9.725	6627	11	24.800	14.690	6699	16	16.514	20.643					6868	17	18.300	5.294
6556	20	6.431	9.331	6628	11	4.710	15.118	6700*	40	19.415	20.505					6869	13	25.846	5.866
6557	12	7.810	9.746	6629*	50	7.684	15.907	6701	12	20.470	20.636					6870	9	1.996	6.422
6558	11	8.911	9.156	6630	21	7.965	15.128	6702	10	22.081	20.450					6871	26	2.674	6.882
6559	27	11.396	9.200	6631	11	7.983	15.784	6703*	61	23.018	20.632					6872	33	3.031	6.309
6560*	40	13.314	9.565	6632	15	11.430	15.815	6704	16	25.281	20.194					6873	21	3.914	6.906
6561*	60	20.983	9.946	6633	14	12.945	15.086	6705*	86	1.432	21.224					6874	14	5.687	6.736
6562	18	2.196	10.016	6634	8	14.518	15.057	6706	30	2.486	21.944					6875	13	9.546	6.306
6563	10	3.004	10.228	6635	13	15.478	15.984	6707	44	3.858	21.580					6876	24	11.092	6.074
6564	37	5.210	10.918	6636	19	15.838	15.556	6708*	66	6.878	21.666					6877	21	13.080	6.950
6565	26	9.108	10.830	6637*	82	17.074	15.666	6709	17	8.644	21.362					6878	12	17.454	6.278
6566	10	9.534	10.118	6638	18	23.573	15.168	6710	30	13.386	21.344					6879	34	18.036	6.624
6567	8	14.694	10.722	6639	29	24.075	15.942	6711	20	16.600	21.902					6880	9	22.104	6.982
6568	15	18.718	10.766	6640	19	24.602	15.122	6712	21	20.644	21.894					6881	8	22.842	6.239
6569	10	23.256	10.560	6641	23	1.102	16.306	6713	24	7.746	22.077					6882	10	0.382	7.864
6570	14	23.534	10.612	6642	10	3.296	16.371	6714	10	13.783	22.945					6883*	40	1.391	7.460
6571	11	25.579	10.594	6643	10	4.540	16.238	6715	22	13.792	22.850					6884	8	4.048	7.730
6572	32	4.728	11.414	6644	9	10.975	16.342	6716	40	17.803	22.536					6885	8	4.776	7.634
6573	39	5.132	11.304	6645	12	12.724	16.360	6717	11	18.231	22.186					6886	13	5.785	7.950
6574	14	5.150	11.058	6646	15	16.086	16.376	6718	41	23.874	22.577					6887	37	6.691	7.521
6575	11	5.340	11.630	6647	12	16.265	16.200	6719	14	24.335	22.934					6888*	45	11.425	7.480
6576	12	5.440	11.472	6648*	66	17.440	16.710	6720	10	24.754	22.158					6889	29	18.694	7.418
6577	22	5.911	11.561	6649*	62	19.256	16.668	6721	24	1.868	23.292					6890	27	19.214	7.304
6578	8	7.236	11.173	6650	17	24.722	16.506	6722	20	3.218	23.058					6891	20	23.146	7.329
6579	25	8.125	11.394	6651	20	25.446	16.887	6723	9	4.088	23.978					6892	32	23.986	7.606
6580	11	9.116	11.540	6652	11	0.826	17.919	6724	21	6.865	23.254					6893	9	24.914	7.675
6581	35	12.490	11.208	6653	13	2.321	17.670	6725	9	9.720	23.386					6894	10	1.200	8.350
6582	18	13.265	11.492	6654	10	2.874	17.846	6726	11	10.025	23.508					6895	20	2.408	8.727
6583	10	16.039	11.600	6655	20	5.315	17.634	6727	30	11.380	23.146					6896	32	5.170	8.543
6584	10	16.400	11.906	6656	29	11.358	17.051	6728	10	11.747	23.042					6897	19	5.668	8.851
6585	12	17.854	11.564	6657	13	13.326	17.530	6729	13	13.876	23.216					6898	34	7.078	8.442
6586	42	21.450	11.166	6658*	57	14.161	17.140	6730	10	14.718	23.884					6899	18	12.233	8.722
6587	9	22.318	11.976	6659	25	18.996	17.185	6731	31	20.078	23.878					6900	11	15.985	8.386
6588	10	23.900	11.824	6660	18	19.258	17.684	6732	9	21.476	23.200					6901	40	18.214	8.188
6589*	52	24.762	11.413	6661	13	23.162	17.725	6733	36	3.053	24.650					6902	32	19.347	8.466
6590	35	2.400	12.186	6662	14	23.522	17.744	6734	20	3.447	24.316					6903	35	22.216	8.064
6591	12	2.955	12.710	6663	11	1.880	18.018	6735	46	4.800	24.233					6904	37	22.378	8.388
6592	36	4.174	12.698	6664	25	2.946	18.641	6736	11	8.525	24.710					6905	11	24.506	8.659
6593	15	4.702	12.194	6665	29	7.832	18.591	6737	14	8.942	24.340					6906	12	4.472	9.096
6594	26	6.597	12.758	6666	27	7.946	18.968	6738	11	9.216	24.411					6907	35	6.917	9.757
6595	25	8.830	12.976	6667	23	9.526	18.506	6739	14	15.680	24.902					6908	34	8.905	9.178
6596	20	12.300	12.810	6668	19	10.368	18.366	6740	17	15.700	24.307					6909	20	9.523	9.372



6911	8	16.964	9.674	6983	23	10.034	14.212	7055	9	20.168	19.602	7127	20	20.698	25.616	7195	18	0.392	4.904
6912	34	16.996	9.348	6984	12	12.734	14.526	7056	14	20.250	19.184	7128	26	22.510	25.348	7196	8	2.461	4.774
6913	9	17.328	9.913	6985	11	15.283	14.356	7057	12	22.686	19.414	7129	21	22.522	25.547	7197	25	4.849	4.420
6914*	57	22.185	9.467	6986	8	17.903	14.744	7058	13	22.881	19.053	7130	33	22.642	25.252	7198	10	5.373	4.286
6915	27	25.112	9.112	6987	15	18.050	14.740	7059	13	23.872	19.074					7199	20	11.578	4.554
6916	8	1.202	10.334	6988	8	19.536	14.150	7060	28	24.341	19.276					7200	10	11.579	4.434
6917	18	1.482	10.378	6989	35	2.096	15.702	7061	8	0.173	20.237					7201	20	11.684	4.518
6918	11	3.528	10.334	6990	11	5.201	15.760	7062*	50	1.106	20.406					7202	22	12.146	4.148
6919	21	4.594	10.790	6991	14	7.413	15.046	7063	15	5.240	20.185					7203	8	13.762	4.292
6920	34	4.668	10.807	6992	25	9.171	15.786	7064	30	7.360	20.538					7204	8	16.785	4.492
6921	23	6.103	10.157	6993	10	9.308	15.780	7065	12	9.002	20.830					7205	8	17.869	4.380
6922*	65	11.080	10.975	6994	20	10.996	15.911	7066	11	10.422	20.366					7206*	53	22.136	4.552
6923	11	11.132	10.502	6995	24	12.288	15.218	7067*	40	15.265	20.550					7207	23	5.969	5.612
6924	12	14.048	10.484	6996	13	13.186	15.600	7068*	38	15.875	20.988					7208	20	10.522	5.780
6925	10	16.230	10.754	6997	8	16.066	15.452	7069	22	16.196	20.306					7209	38	17.095	5.944
6926	38	17.962	10.256	6998	12	18.854	15.770	7070	30	19.304	20.476					7210	27	17.406	5.998
6927	30	21.006	10.450	6999	20	19.548	15.554	7071	20	21.405	20.070					7211	9	0.632	6.558
6928	10	21.338	10.925	7000	26	22.064	15.449	7072	8	25.896	20.718					7212	12	3.629	6.144
6929	14	22.615	10.080	7001	12	24.796	15.560	7073	11	2.872	21.906					7213	13	4.872	6.846
6930	9	23.733	10.914	7002	13	25.022	15.014	7074	22	5.564	21.341					7214	15	8.100	6.812
6931	29	24.953	10.305	7003	18	2.755	16.254	7075	17	10.700	21.880					7215	8	8.410	6.286
6932	8	0.268	11.597	7004	23	3.485	16.626	7076	12	11.806	21.094					7216	9	8.500	6.469
6933	10	0.286	11.760	7005	8	6.188	16.454	7077	10	12.450	21.326					7217	15	9.234	6.341
6934	12	1.866	11.587	7006	34	8.386	16.650	7078	19	14.762	21.454					7218	8	15.084	6.222
6935*	41	2.718	11.163	7007	17	9.757	16.259	7079	34	15.397	21.722					7219	34	20.263	6.147
6936	13	3.233	11.929	7008	36	9.826	16.969	7080*	57	15.542	21.262					7220	10	20.480	6.405
6937	26	5.057	11.808	7009	9	12.339	16.586	7081	31	19.253	21.766					7221	8	21.770	6.336
6938	32	5.153	11.843	7010	12	14.266	16.766	7082	21	19.534	21.466					7222	8	22.381	6.935
6939	21	5.364	11.313	7011	29	14.343	16.848	7083	10	20.435	21.492					7223	12	0.947	7.646
6940	8	10.823	11.228	7012	14	14.820	16.037	7084	8	20.732	21.192					7224	20	1.792	7.910
6941	8	12.025	11.707	7013*	34	15.522	16.624	7085	34	22.086	21.172					7225	9	2.718	7.966
6942	11	16.224	11.903	7014	10	24.816	16.052	7086	35	23.011	21.500					7226	10	7.036	7.706
6943	28	19.488	11.376	7015	10	1.574	17.509	7087	24	24.544	21.082					7227	13	12.689	7.080
6944	13	19.800	11.454	7016	12	4.188	17.754	7088	11	25.927	21.692					7228	27	12.816	7.387
6945	30	21.891	11.546	7017	10	7.872	17.006	7089	31	1.998	22.340					7229	16	14.044	7.718
6946	10	22.668	11.815	7018	14	9.672	17.358	7090	17	2.464	22.689					7230	9	15.169	7.786
6947	25	23.880	11.835	7019	21	10.136	17.420	7091	42	6.452	22.851					7231	22	18.596	7.152
6948	25	23.954	11.171	7020	23	13.814	17.315	7092	14	8.600	22.441					7232	9	18.766	7.319
6949	9	24.658	11.139	7021	25	14.560	17.424	7093	12	9.241	22.774					7233*	46	19.471	7.878
6950	30	0.384	12.366	7022	12	15.328	17.139	7094	20	9.360	22.514					7234	29	0.025	8.392
6951	21	1.808	12.562	7023	11	17.493	17.991	7095	19	9.785	22.658					7235	38	0.191	8.713
6952	9	2.536	12.285	7024*	40	18.177	17.835	7096	31	10.702	22.968					7236	10	2.323	8.956
6953	10	3.488	12.946	7025	14	19.091	17.298	7097*	44	13.394	22.241					7237	23	5.754	8.022
6954	18	7.187	12.596	7026	30	21.963	17.358	7098	27	15.174	22.150					7238	12	6.660	8.476
6955	8	12.400	12.205	7027	17	24.597	17.968	7099	17	15.524	22.140					7239	20	11.114	8.920
6956	13	12.450	12.270	7028	45	25.584	17.909	7100	11	16.088	22.036					7240	23	11.226	8.202
6957	10	12.744	12.520	7029	34	2.402	18.150	7101	25	17.078	22.326					7241	10	15.034	8.490
6958	11	12.869	12.299	7030	20	4.750	18.584	7102	21	17.589	22.131					7242	13	16.124	8.870
6959	8	16.844	12.190	7031	35	10.566	18.751	7103	38	25.457	22.443					7243	11	19.552	8.877
6960	29	20.380	12.662	7032	22	13.948	18.938	7104	8	8.047	23.124					7244	8	19.884	8.983
6961	25	22.880	12.881	7033	19	15.051	18.754	7105	12	8.076	23.020					7245	12	20.107	8.672
6962	16	23.574	12.564	7034	9	18.656	18.582	7106	15	12.268	23.950					7246	60	0.008	9.798
6963	27	6.376	13.962	7035*	60	25.150	18.980	7107	30	14.356	23.538					7247	23	2.937	9.399
6964	11	6.453	13.308	7036	13	25.251	18.210	7108	36	17.604	23.375					7248	24	6.786	9.883
6965	24	6.772	13.306	7037	37	1.248	19.216	7109	35	6.396	24.429					7249	25	8.040	9.700
6966	23	7.136	13.786	7038	13	1.336	19.510	7110	10	11.284	24.840					7250	10	9.190	9.936
6967	28	7.212	13.610	7039	15	1.982	19.394	7111	8	12.953	24.726					7251*	37	11.958	9.713
6968*	35	8.182	13.696	7040	10	3.256	19.370	7112	26	15.056	24.406					7252*	42	15.606	9.698
6969	24	10.260	13.234	7041	15	3.369	19.935	7113	12	16.107	24.650					7253	10	20.687	9.444
6970	12	10.479	13.924	7042*	36	4.886	19.174	7114	30	19.091	24.550					7254	23	22.227	9.807
6971	24	10.678	13.580	7043	22	5.580	19.844	7115	10	19.637	24.574					7255	10	22.450	9.818
6972	8	11.658	13.570	7044	10	5.788	19.266	7116	10	20.704	24.055					7256	10	0.454	10.404
6973	9	13.407	13.111	7045	8	7.794	19.450	7117	28	21.226	24.590					7257	14	2.794	10.596
6974	16	14.369	13.635	7046	16	8.791	19.311	7118	29	22.124	24.700					7258	24	4.811	10.998
6975	32	16.197	13.919	7047	13	9.446	19.714	7119	43	25.578	24.631					7259	20	4.948	10.929
6976	32	22.915	13.543	7048	13	10.608	19.542	7120	49	3.614	25.288					7260	11	6.918	10.674
6977	11	1.415	14.178	7049	26	10.718	19.038	7121	20	9.212	25.085					7261	9	8.357	10.566
6978	21	1.586	14.934	7050	15	12.574	19.258	7122	15	10.615	25.145					7262	18	8.814	10.275
6979	25	2.615	14.870	7051	19	13.622	19.680	7123	17	13.665	25.189					7263	10	13.270	10.883
6980	15	2.810	14.435	7052	8	16.305	19.703	7124	16	13.918	25.135					7264	15	20.456	10.936
6981	16	7.428	14.932	7053*	40	19.327	19.744	7125	46	16.818	25.446					7265	8	25.486	10.784
6982	9	8.717	14.070	7054	8	20.060	19.726	7126											



7267	18	1.809	11.474	7339	8	24.860	15.360	7411	13	15.943	20.785
7268	9	2.512	11.434	7340	9	2.741	16.346	7412	8	17.450	20.545
7269	8	5.240	11.112	7341	8	3.686	16.804	7413	10	19.754	20.594
7270	26	5.364	11.382	7342	10	4.256	16.654	7414	20	21.463	20.951
7271	18	6.006	11.240	7343	12	5.334	16.224	7415	11	22.152	20.036
7272	10	8.716	11.572	7344	23	7.333	16.826	7416	9	23.208	20.402
7273	24	9.310	11.064	7345	25	7.711	16.172	7417	12	23.231	20.054
7274	10	11.660	11.898	7346	12	8.002	16.359	7418*	76	24.658	20.388
7275	12	14.235	11.451	7347	18	12.448	16.127	7419	40	25.222	20.762
7276	22	15.776	11.618	7348	12	14.050	16.330	7420	10	25.908	20.190
7277	18	16.632	11.581	7349	33	15.020	16.064	7421	30	0.078	21.498
7278	14	18.318	11.198	7350	26	15.471	16.481	7422	30	1.002	21.814
7279	27	19.520	11.600	7351	10	16.311	16.565	7423	16	2.532	21.376
7280*	75	19.680	11.075	7352	24	16.585	16.906	7424	11	3.924	21.967
7281	9	19.775	11.618	7353	10	18.228	16.108	7425*	40	4.462	21.715
7282	8	19.780	11.796	7354	31	21.240	16.349	7426	13	8.798	21.637
7283	10	24.877	11.999	7355	10	21.561	16.702	7427	31	10.530	21.856
7284	9	24.947	11.856	7356	8	23.588	16.372	7428	11	13.848	21.533
7285	10	25.734	11.664	7357	20	6.348	17.438	7429	11	15.316	21.383
7286	9	0.534	12.135	7358	23	6.636	17.528	7430	9	15.750	21.350
7287	10	1.445	12.872	7359	17	12.520	17.184	7431	34	17.516	21.076
7288	14	1.742	12.141	7360	16	17.155	17.343	7432*	33	20.177	21.760
7289	14	4.679	12.247	7361	19	18.495	17.672	7433	13	22.606	21.749
7290	9	4.904	12.361	7362	20	19.162	17.810	7434*	40	3.464	22.728
7291	34	5.130	12.414	7363	13	20.496	17.620	7435*	58	6.706	22.598
7292	8	7.708	12.900	7364	25	21.440	17.734	7436	9	6.966	22.989
7293	8	9.951	12.890	7365	9	23.246	17.986	7437	16	7.774	22.252
7294	9	12.020	12.788	7366	8	2.304	18.774	7438	8	9.550	22.316
7295	12	16.120	12.796	7367	12	2.542	18.262	7439	9	11.244	22.980
7296	10	18.528	12.005	7368	11	3.202	18.495	7440	22	13.680	22.112
7297	8	19.143	12.676	7369*	40	3.524	18.188	7441	9	14.448	22.070
7298	13	19.882	12.446	7370	14	5.300	18.743	7442	12	17.454	22.559
7299	10	21.794	12.394	7371	10	6.384	18.038	7443*	40	17.990	22.801
7300	24	22.320	12.400	7372	21	7.642	18.695	7444	17	5.104	23.376
7301	29	25.105	12.044	7373	35	7.904	18.333	7445	18	7.952	23.702
7302	15	0.756	13.198	7374	21	8.491	18.086	7446	13	9.298	23.902
7303	23	0.800	13.860	7375	8	10.505	18.484	7447	18	11.811	23.648
7304*	40	6.020	13.113	7376	12	12.626	18.944	7448	14	12.089	23.796
7305	25	6.156	13.144	7377	27	12.654	18.845	7449	11	12.233	23.476
7306	15	7.255	13.654	7378	14	13.450	18.721	7450	26	13.565	23.976
7307*	37	7.556	13.722	7379	12	18.078	18.914	7451	15	20.040	23.973
7308	10	10.855	13.567	7380	13	19.542	18.177	7452	8	20.482	23.990
7309	14	13.436	13.434	7381	35	20.519	18.108	7453	12	25.051	23.334
7310	8	13.504	13.658	7382	20	24.602	18.588	7454*	45	3.614	24.914
7311	17	14.862	13.472	7383	11	25.754	18.778	7455	28	5.138	24.073
7312	9	15.450	13.694	7384	10	0.650	19.733	7456	12	5.574	24.396
7313	11	16.236	13.404	7385	10	0.838	19.370	7457	15	8.481	24.234
7314	8	17.862	13.150	7386	9	1.834	19.378	7458	10	20.314	24.576
7315	9	21.064	13.596	7387	23	2.304	19.574	7459	12	22.322	24.474
7316	21	21.310	13.998	7388	11	3.100	19.241	7460	14	23.032	24.751
7317*	24	21.310	13.980	7389*	68	3.104	19.266	7461	20	0.162	25.026
7318	16	23.145	13.086	7390	14	7.384	19.418	7462	16	0.556	25.671
7319	11	23.303	13.968	7391	10	10.269	19.128	7463	13	0.574	25.868
7320	9	2.496	14.578	7392	20	10.592	19.620	7464	36	0.688	25.576
7321	20	7.336	14.282	7393	10	15.478	19.934	7465	23	17.941	25.270
7322	10	8.279	14.202	7394	32	18.320	19.509	7466	8	18.281	25.286
7323	23	8.344	14.624	7395	8	20.150	19.231				
7324*	29	9.370	14.316	7396	23	21.669	19.228				
7325	11	11.224	14.956	7397	8	21.886	19.350				
7326	9	12.706	14.115	7398*	54	22.020	19.248				
7327	9	19.030	14.522	7399	9	23.974	19.632				
7328	8	19.316	14.407	7400	20	5.432	20.685				
7329	10	21.689	14.210	7401	10	6.928	20.480				
7330	8	22.204	14.693	7402*	49	6.944	20.188				
7331	10	2.708	15.852	7403	8	7.616	20.264				
7332	12	2.928	15.300	7404	23	7.908	20.460				
7333	10	4.110	15.711	7405	15	10.660	20.812				
7334	23	4.681	15.292	7406*	60	10.930	20.736				
7335	31	4.880	15.384	7407	8	12.189	20.318				
7336*	40	10.904	15.728	7408	10	12.717	20.658				
7337	12	13.310	15.400	7409	12	13.288	20.146				
7338	10	24.019	15.242	7410	12	15.590	20.202				

R.A. 4<sup>h</sup> 28<sup>m</sup>

Plate 900 ; 1916 Feb. 15.

Provisional Constants.

A	B	C
-0.02578	+0.00061	+0.1610

D	E	F
-0.00043	-0.02589	-0.1885

Mag. = 16.7 - 1.09√d

No.	d	x	y
7501	17	2.382	0.904
7502*	51	6.685	0.876
7503	19	11.596	0.321
7504	19	12.636	0.164
7505*	48	12.890	0.242
7506	9	18.200	0.890
7507*	42	19.250	0.010
7508*	71	0.336	1.572
7509	10	6.941	1.764
7510	10	17.470	1.640
7511*	27	22.922	1.814
7512*	42	24.746	1.846
7513	19	4.262	2.315
7514	23	6.323	2.730
7515	17	6.560	2.541
7516	19	7.139	2.482
7517*	46	8.730	2.791
7518	18	12.676	2.069
7519	19	16.335	2.157
7520	15	18.333	2.846
7521	22	19.354	2.075
7522	30	0.016	3.664
7523	11	11.292	3.709
7524	19	15.060	3.014
7525	23	5.226	4.447
7526	12	7.947	4.400
7527*	41	13.164	4.867
7528	10	15.523	4.662
7529	11	19.312	4.124
7530	16	19.325	4.100
7531	14	4.219	5.582
7532	10	5.075	5.621
7533	10	12.350	5.826
7534	23	12.682	5.117
7535	13	13.777	5.696
7536	9	15.808	5.644
7537*	71	16.914	5.359
7538	10	19.722	5.744
7539	28	24.080	5.339
7540	23	24.878	5.906
7541	20	4.842	6.286
7542	16	5.516	6.890
7543	15	7.940	6.700
7544	14	8.420	6.296
7545	22	10.088	6.775
7546	13	11.944	6.200
7547	10	12.088	6.312
7548	14	12.518	6.640
7549	8	19.856	6.774
7550	16	20.136	6.242
7551	23	23.482	6.882
7552	10	0.378	7.438
7553	21	5.080	7.100
7554	20	6.751	7.064
7555	14	7.056	7.420

7556	19	7.295	7.005
7557	15	10.858	7.686
7558*	47	24.676	7.528
7559*	56	3.818	8.942
7560	14	4.880	8.958
7561	14	9.084	8.750
7562	8	9.334	8.857
7563	23	16.580	8.548
7564	12	17.708	8.352
7565	22	20.129	8.234
7566	18	22.835	8.342
7567	17	0.014	9.879
7568	15	8.800	9.293
7569	22	11.355	9.166
7570	24	12.988	9.960
7571	19	14.294	9.152
7572	28	15.599	9.154
7573	26	15.856	9.948
7574	22	16.119	9.250
7575	10	19.523	9.676
7576	9	21.110	9.650
7577	8	24.852	9.180
7578	8	12.612	10.870
7579	9	16.080	10.368
7580	12	25.262	10.913
7581	12	3.532	11.706
7582	12	4.268	11.796
7583	20	4.790	11.980
7584*	46	5.294	11.988
7585	18	9.758	11.491
7586	21	9.828	11.490
7587	10	10.763	11.864
7588	14	11.323	



7628	22	15.884	14.800	7700	15	12.329	21.590	7756	11	23.644	0.235	7828	12	4.451	9.504	7900	14	10.606	15.720
7629	9	17.020	14.572	7701	11	12.968	21.378	7757	32	24.230	0.826	7829	22	13.442	9.192	7901	21	15.170	15.272
7630	10	23.646	14.295	7702	19	17.479	21.568	7758*	36	0.655	1.734	7830	15	15.436	9.348	7902	17	17.668	15.074
7631	11	24.530	14.271	7703	22	21.700	21.590	7759*	44	2.481	1.746	7831	10	16.810	9.484	7903	18	17.686	15.178
7632	12	2.685	15.414	7704	12	4.238	22.829	7760	18	10.005	1.188	7832	20	22.194	9.420	7904	36	2.546	16.592
7633	34	5.512	15.666	7705	28	6.824	22.717	7761	20	6.476	2.673	7833	10	23.748	9.456	7905	16	3.426	16.027
7634	18	5.783	15.644	7706	27	7.896	22.944	7762	17	6.705	2.851	7834	17	24.330	9.516	7906*	36	9.932	16.374
7635	12	6.860	15.440	7707	14	8.992	22.036	7763	23	7.642	2.384	7835	19	25.206	9.690	7907	10	10.656	16.458
7636	19	7.190	15.751	7708*	42	11.750	22.584	7764	21	11.631	2.984	7836	13	3.106	10.808	7908	14	12.916	16.283
7637	12	7.724	15.413	7709*	54	14.198	22.036	7765	10	17.844	2.474	7837	18	4.076	10.148	7909	16	13.848	16.282
7638	8	12.816	15.556	7710	9	17.170	22.458	7766	23	18.566	2.203	7838	15	4.456	10.030	7910	16	14.174	16.592
7639	25	14.500	15.669	7711	19	18.420	22.840	7767*	38	19.148	2.224	7839	13	4.761	10.875	7911	13	15.336	16.714
7640	16	17.114	15.774	7712	21	20.482	22.084	7768*	48	19.520	2.439	7840*	40	8.078	10.924	7912	15	16.786	16.512
7641	11	19.554	15.277	7713	13	22.940	22.473	7769	16	24.136	2.968	7841	12	8.772	10.355	7913	13	24.286	16.776
7642	27	23.790	15.296	7714	22	24.794	22.470	7770	42	6.196	3.614	7842	17	9.513	10.666	7914	19	1.447	17.753
7643	8	1.420	16.434	7715	12	2.935	23.386	7771	34	10.262	3.295	7843	9	10.864	10.494	7915	11	6.710	17.868
7644	14	13.430	16.080	7716	17	5.554	23.676	7772	8	11.358	3.716	7844	10	11.912	10.254	7916	16	10.872	17.825
7645	14	19.032	16.926	7717	16	5.966	23.059	7773	21	12.666	3.862	7845	15	16.334	10.346	7917	20	13.060	17.673
7646	12	19.284	16.220	7718	18	8.422	23.750	7774	14	13.131	3.019	7846	30	22.586	10.046	7918	14	17.635	17.235
7647	25	19.550	16.028	7719	11	9.534	23.419	7775	44	15.091	3.497	7847*	90	23.110	10.660	7919	15	19.054	17.156
7648	13	21.493	16.668	7720	12	11.630	23.190	7776	12	15.985	3.795	7848	16	24.352	10.434	7920	13	19.090	17.502
7649	12	22.050	16.524	7721*	62	15.571	23.851	7777	12	2.596	4.956	7849*	40	0.777	11.607	7921	12	21.568	17.648
7650	28	24.634	16.690	7722	31	15.964	23.583	7778	10	7.314	4.252	7850	10	3.899	11.078	7922	17	25.648	17.090
7651	10	25.520	16.140	7723	50	16.008	23.525	7779	19	9.956	4.156	7851	14	4.226	11.606	7923	36	1.586	18.096
7652	17	8.099	17.692	7724	31	18.912	23.706	7780*	46	11.214	4.245	7852	8	5.114	11.065	7924	36	2.157	18.354
7653	10	13.920	17.510	7725	8	20.925	23.481	7781	25	16.492	4.813	7853	14	9.536	11.955	7925	25	2.518	18.778
7654*	46	17.008	17.014	7726	13	0.924	24.812	7782	11	17.118	4.616	7854	12	9.876	11.772	7926	25	2.791	18.166
7655*	40	19.416	17.287	7727	9	4.597	24.040	7783	11	21.292	4.557	7855	18	10.094	11.422	7927	22	2.950	18.610
7656*	42	22.020	17.512	7728	43	6.066	24.930	7784	40	25.862	4.763	7856	21	13.845	11.408	7928	15	3.486	18.834
7657	14	23.522	17.838	7729	47	17.480	24.584	7785	36	1.856	5.245	7857	19	15.326	11.484	7929	27	7.466	18.172
7658	20	2.453	18.638	7730	9	18.266	24.872	7786	30	2.664	5.804	7858	25	17.563	11.965	7930	11	10.412	18.196
7659	12	3.604	18.820	7731	14	22.728	24.800	7787	10	7.725	5.614	7859	12	18.048	11.371	7931	11	17.114	18.586
7660	14	4.293	18.850	7732	11	23.196	24.304	7788	10	7.904	5.165	7860	13	23.874	11.359	7932	9	17.190	18.896
7661	39	6.015	18.075	7733	11	23.614	24.213	7789	10	10.246	5.274	7861	9	24.055	11.600	7933	14	22.518	18.128
7662	9	6.275	18.531	7734	24	23.806	24.307	7790	17	10.552	5.214	7862	18	24.284	11.860	7934	27	24.498	18.670
7663	15	15.130	18.556	7735	13	6.915	25.732	7791	16	10.704	5.111	7863	16	0.158	12.239	7935	9	24.624	18.324
7664	10	16.354	18.924	7736	12	11.634	25.228	7792	9	11.394	5.264	7864	18	3.632	12.766	7936	15	4.758	19.388
7665	13	17.466	18.296	7737	17	11.784	25.436	7793	18	18.060	5.822	7865*	36	7.516	12.800	7937	12	9.531	19.730
7666	18	19.322	18.252	7738	50	12.816	25.020	7794	17	19.234	5.792	7866	13	10.066	12.308	7938	18	11.866	19.037
7667	10	22.830	18.946	7739	18	12.948	25.555	7795	11	20.101	5.122	7867	14	11.446	12.194	7939*	40	15.566	19.834
7668	31	23.660	18.184	7740	17	18.676	25.478	7796	16	1.246	6.824	7868	13	15.524	12.586	7940	14	19.654	19.704
7669	28	24.224	18.446	7741	9	19.751	25.568	7797	21	1.276	6.798	7869	19	16.064	12.435	7941	21	22.430	19.615
7670	19	24.579	18.874	7742	113	20.076	25.712	7798*	56	5.350	6.912	7870	17	18.769	12.844	7942	37	23.598	19.722
7671	22	24.860	18.268					7799	12	7.926	6.076	7871	26	18.900	12.626	7943	23	24.231	19.708
7672	22	25.013	18.713					7800	15	8.752	6.530	7872	9	20.136	12.894	7944	20	3.940	20.036
7673	9	25.544	18.946					7801	21	11.705	6.922	7873*	39	23.694	12.356	7945	26	6.421	20.745
7674	19	5.220	19.181					7802	36	12.064	6.385	7874*	52	23.950	12.420	7946	11	6.738	20.966
7675	18	6.315	19.736					7803	34	14.808	6.028	7875	17	24.388	12.387	7947	14	7.448	20.266
7676	12	14.648	19.714					7804	16	21.794	6.474	7876	13	25.914	12.209	7948	28	8.883	20.502
7677*	68	14.868	19.150					7805	9	24.836	6.412	7877	15	2.291	13.219	7949	14	9.016	20.724
7678	14	15.293	19.680					7806	39	25.198	6.236	7878	32	3.025	13.964	7950	17	10.244	20.494
7679	12	16.320	19.152					7807*	46	2.475	7.427	7879*	38	8.684	13.382	7951	23	11.364	20.588
7680	10	17.065	19.604					7808	14	4.512	7.318	7880	15	11.246	13.166	7952	36	11.974	20.095
7681	22	18.356	19.469					7809	30	9.974	7.905	7881	13	12.186	13.242	7953	15	14.294	20.424
7682	32	21.906	19.562					7810	18	10.655	7.572	7882	10	20.413	13.626	7954	22	17.556	20.198
7683	13	1.090	20.116					7811	20	12.534	7.115	7883*	52	24.258	13.348	7955	34	22.910	20.679
7684*	94	2.513	20.440					7812	10	17.670	7.675	7884	16	24.924	13.187	7956	36	23.784	20.138
7685	42	3.082	20.810					7813	18	18.926	7.534	7885	17	25.256	13.149	7957	13	6.716	21.063
7686	9	3.768	20.236					7814	12	23.804	7.138	7886	15	1.528	14.208	7958	11	9.672	21.723
7687	21	4.703	20.302					7815	16	0.646	8.264	7887	14	2.412	14.174	7959	27	9.902	21.225
7688	13	8.707	20.073					7816	17	6.900	8.709	7888	17	5.093	14.792	7960	11	12.250	21.482
7689	21	9.186	20.340					7817	9	8.208	8.892	7889	21	6.863	14.883	7961	22	18.140	21.938
7690*	49	9.589	20.558					7818	11	11.880	8.705	7890	36	8.642	14.546	7962	16	0.926	22.392
7691	12	10.212	20.506					7819	21	14.952	8.532	7891	28	9.199	14.410	7963	34	2.781	22.370
7692	11	17.467	20.468					7820	15	14.978	8.636	7892	14	11.634	14.134	7964*	74	7.615	22.213
7693	12	17.739	20.214					7821	9	18.608	8.722	7893	10	11.885	14.181	7965	36	8.806	22.035
7694	21	17.840	20.451					7822	19	18.98									



7972	18	4.034	23.184	8021	21	19.886	1.044	8093	43	14.828	7.228	8165	20	12.413	12.820	8237	9	16.910	16.968
7973*	42	4.844	23.331	8022	44	20.398	1.036	8094	11	15.067	7.254	8166	20	12.705	12.436	8238	22	18.224	16.457
7974	40	7.460	23.369	8023	17	23.338	1.944	8095	27	19.606	7.692	8167	11	13.600	12.856	8239	11	19.035	16.400
7975*	46	9.192	23.208	8024	20	4.468	2.296	8096	9	22.191	7.014	8168	34	15.064	12.933	8240	16	23.514	16.830
7976	38	9.692	23.354	8025	27	6.114	2.057	8097	13	24.237	7.158	8169	10	17.969	12.948	8241	33	23.560	16.697
7977	23	13.110	23.617	8026	47	6.875	2.642	8098	16	24.978	7.896	8170	11	18.454	12.116	8242	44	24.015	16.580
7978*	36	14.090	23.063	8027	41	7.792	2.417	8099	16	0.586	8.566	8171	28	21.190	12.202	8243	24	3.643	17.172
7979	12	17.984	23.631	8028	25	10.275	2.653	8100	12	2.082	8.638	8172	14	22.234	12.537	8244	15	3.735	17.715
7980	30	19.484	23.735	8029	39	13.498	2.024	8101	12	8.636	8.131	8173	36	22.385	12.653	8245	13	6.350	17.122
7981*	50	19.802	23.803	8030	12	15.298	2.886	8102	20	10.030	8.384	8174	10	23.772	12.139	8246	14	7.143	17.736
7982	18	0.744	24.724	8031	13	19.460	2.168	8103	13	10.232	8.328	8175	12	24.544	12.380	8247	10	8.261	17.606
7983	14	1.202	24.224	8032	11	19.976	2.872	8104	11	15.500	8.190	8176	16	24.850	12.324	8248	15	9.205	17.284
7984	10	1.624	24.126	8033	19	21.304	2.549	8105	32	15.850	8.084	8177	46	25.650	12.238	8249	39	10.850	17.684
7985	23	1.810	24.216	8034	44	23.050	2.293	8106	12	16.134	8.756	8178	10	2.126	13.338	8250	29	13.206	17.236
7986	18	8.764	24.741	8035	9	23.230	2.374	8107	10	19.754	8.531	8179*	68	2.204	13.448	8251	25	14.958	17.840
7987	33	10.899	24.464	8036	33	24.224	2.298	8108*	45	20.110	8.845	8180	18	2.870	13.278	8252	18	18.308	17.594
7988	30	11.531	24.878	8037	22	24.668	2.727	8109	35	20.931	8.906	8181	20	3.206	13.235	8253	16	18.584	17.427
7989	28	12.895	24.030	8038	12	25.758	2.389	8110	11	21.780	8.341	8182	11	3.401	13.318	8254	12	18.700	17.831
7990	37	15.176	24.664	8039	11	0.798	3.295	8111	22	0.095	9.544	8183	18	4.093	13.522	8255	14	20.740	17.474
7991	31	22.034	24.695	8040	17	1.962	3.070	8112	11	1.651	9.560	8184	9	6.380	13.724	8256	13	21.162	17.947
7992	16	23.712	24.750	8041	20	6.868	3.902	8113	24	2.233	9.616	8185	10	7.545	13.509	8257	38	21.840	17.049
7993	32	4.072	25.024	8042	13	7.223	3.683	8114	25	3.112	9.778	8186	13	7.841	13.200	8258	17	22.672	17.450
7994	30	6.824	25.590	8043	9	9.078	3.205	8115	36	4.287	9.096	8187	10	9.610	13.598	8259	32	25.358	17.506
7995	10	7.278	25.216	8044	17	9.945	3.090	8116	12	5.767	9.343	8188	11	10.282	13.226	8260	15	0.524	18.250
7996	17	8.994	25.632	8045	13	18.888	3.014	8117	40	8.274	9.345	8189	11	11.730	13.170	8261	9	2.100	18.604
7997	16	10.359	25.025	8046	23	19.662	3.877	8118	23	10.864	9.907	8190	8	14.660	13.410	8262	40	2.510	18.765
7998	48	11.258	25.123	8047	11	20.342	3.465	8119	11	17.038	9.356	8191	18	15.796	13.192	8263	17	2.634	18.415
7999	20	18.782	25.055	8048	15	23.558	3.538	8120	40	17.888	9.500	8192	39	18.021	13.234	8264	26	4.981	18.878
				8049	63	25.586	3.963	8121	11	18.892	9.427	8193*	74	19.360	13.260	8265	9	5.072	18.927
				8050	15	1.896	4.006	8122	40	21.800	9.290	8194	29	21.845	13.394	8266	13	11.356	18.191
				8051*	53	3.706	4.842	8123	14	22.400	9.729	8195	21	24.920	13.437	8267	18	12.287	18.665
				8052	12	5.597	4.518	8124	9	23.492	9.132	8196	15	1.035	14.894	8268	14	12.730	18.742
				8053	24	11.980	4.736	8125	36	0.494	10.166	8197	23	3.096	14.230	8269	13	13.859	18.118
				8054	32	12.505	4.865	8126*	130	1.024	10.771	8198	13	3.313	14.604	8270	8	18.410	18.445
				8055	16	14.544	4.584	8127	19	2.264	10.534	8199	10	4.508	14.128	8271	9	20.646	18.897
				8056	9	17.316	4.884	8128	19	4.910	10.700	8200	17	5.360	14.183	8272	27	20.930	18.126
				8057	11	19.946	4.130	8129	39	4.963	10.948	8201	11	5.959	14.338	8273	40	22.346	18.488
				8058	9	20.711	4.580	8130	11	5.316	10.441	8202	13	6.370	14.414	8274	10	25.120	18.586
				8059	11	23.642	4.661	8131	12	6.866	10.421	8203	13	7.339	14.079	8275	23	0.455	19.734
				8060	19	23.884	4.528	8132	11	7.510	10.819	8204	19	7.626	14.626	8276	43	1.624	19.826
				8061	31	24.264	4.881	8133	30	8.860	10.318	8205	41	13.330	14.700	8277	30	2.258	19.806
				8062	26	24.974	4.352	8134	11	9.470	10.329	8206	12	13.838	14.015	8278	12	3.036	19.257
				8063	29	4.536	5.962	8135	38	9.508	10.169	8207	12	18.144	14.805	8279	38	5.070	19.500
				8064*	39	7.984	5.740	8136	20	11.384	10.904	8208	33	18.535	14.114	8280	9	7.894	19.240
				8065*	60	12.540	5.800	8137	11	11.941	10.092	8209	16	22.826	14.014	8281	20	8.400	19.564
				8066	18	18.272	5.668	8138	21	13.128	10.762	8210	11	25.680	14.104	8282	23	9.720	19.923
				8067	12	18.306	5.486	8139	27	15.399	10.240	8211	12	1.506	15.196	8283	9	11.299	19.066
				8068	21	22.126	5.690	8140	18	16.386	10.044	8212	9	4.708	15.200	8284	11	11.493	19.360
				8069	15	2.700	6.504	8141	23	16.667	10.940	8213	10	5.492	15.600	8285	14	15.985	19.899
				8070	46	3.060	6.327	8142	27	19.412	10.890	8214	11	5.546	15.309	8286	33	16.500	19.111
				8071	10	7.842	6.031	8143	26	21.822	10.736	8215	10	8.264	15.529	8287	13	19.663	19.618
				8072	24	9.090	6.580	8144*	44	24.378	10.606	8216	29	8.491	15.017	8288	17	19.920	19.108
				8073	38	10.276	6.884	8145	15	1.800	11.462	8217	13	9.583	15.400	8289	15	20.466	19.786
				8074	22	10.960	6.377	8146	16	1.984	11.700	8218	14	13.711	15.258	8290	20	22.410	19.958
				8075	39	15.233	6.070	8147	20	2.218	11.960	8219	27	16.360	15.956	8291*	50	23.326	19.057
				8076	12	16.312	6.264	8148	30	5.130	11.260	8220	12	18.762	15.463	8292	45	23.365	19.593
				8077	11	18.368	6.136	8149	10	5.373	11.510	8221*	62	18.772	15.120	8293	19	24.394	19.061
				8078	14	18.465	6.560	8150	28	13.336	11.272	8222	14	19.097	15.406	8294	39	0.944	20.792
				8079*	51	20.809	6.752	8151	18	13.780	11.679	8223	24	20.250	15.056	8295	45	1.814	20.244
				8080	24	21.660	6.716	8152	12	14.137	11.488	8224	14	22.627	15.909	8296	16	3.930	20.800
				8081	23	23.789	6.434	8153	11	18.222	11.624	8225	36	22.664	15.362	8297	30	7.085	20.555
				8082	20	23.836	6.556	8154	13	18.355	11.994	8226	21	23.046	15.508	8298	8	13.306	20.852
				8083	16	1.676	7.244	8155	40	21.454	11.178	8227	33	23.348	15.662	8299	16	16.772	20.182
				8084	14	5.900	7.226	8156	37	24.094	11.243	8228	17	2.277	16.874	8300	22	19.544	20.376
				8085	22	5.915	7.332	8157	22	24.512	11.176	8229	11	6.320	16.095	8301	14	19.851	20.068
				8086	10	5.922	7.994	8158	9	24.671	11.432	8230	39	6.830	16.298	8302	16	22.674	20.958
				8087	22	7.541	7.894	8159*	52	1.626	12.464	8231	21	8.781	16.793	8303	10	22.694	20.210
				8088	10	8.350	7.562	8160*	60	1.884	12.526	8232	11	9.068	16.997	8304	23	22.802	20.910
				8089*	75	8.490	7.528	8161	24	2.324	12.488	8							



8309	42	15.544	21.872	<div>R.A. 4<sup>h</sup> 52<sup>m</sup></div> <div>Plate 878; 1916 Nov. 30.</div> <div>Provisional Constants.</div> <div>A            B            C</div> <div>-02562   -00302   +2807</div> <div>D            E            F</div> <div>+00317   -02587   -2387</div> <div>Mag.=16.6-1.09√d</div>	8426	19	19.012	3.136	8498	20	21.201	8.826	8570	15	14.105	12.170
8310	16	21.980	21.375		8427	30	20.546	3.012	8499	8	23.566	8.262	8571	10	14.129	12.629
8311	15	22.286	21.694		8428	14	21.490	3.719	8500	26	23.896	8.915	8572	35	17.079	12.320
8312	36	22.390	21.688		8429	30	21.935	3.823	8501	12	25.063	8.598	8573	23	17.226	12.012
8313	10	22.541	21.468		8430	24	24.755	3.131	8502	13	4.100	9.698	8574	9	18.200	12.078
8314	13	23.499	21.550		8431	16	1.510	4.686	8503	26	4.655	9.647	8575*	42	19.696	12.460
8315	10	23.952	21.908		8432	22	1.748	4.556	8504	12	6.910	9.360	8576	21	22.652	12.177
8316	20	24.452	21.493		8433	11	2.015	4.025	8505	18	7.106	9.828	8577*	46	22.700	12.223
8317	45	25.824	21.614		8434	32	2.130	4.903	8506	26	7.252	9.998	8578	10	22.913	12.156
8318	13	0.895	22.628		8435	29	2.836	4.369	8507	30	7.271	9.494	8579	40	22.918	12.570
8319	15	1.311	22.482	8436	10	7.405	4.040	8508	20	7.562	9.273	8580	35	23.576	12.698	
8320	11	3.300	22.351	8437	42	9.862	4.054	8509	18	8.824	9.181	8581	33	23.838	12.677	
8321	18	3.430	22.580	8438	33	10.972	4.396	8510	8	10.354	9.080	8582	10	24.032	12.894	
8322	47	3.728	22.631	8439	24	12.712	4.919	8511*	32	10.524	9.311	8583	26	2.841	13.458	
8323	11	5.323	22.960	8440	9	13.403	4.360	8512	11	12.967	9.018	8584	11	4.526	13.406	
8324	23	8.376	22.186	8441	9	14.358	4.542	8513	23	14.236	9.739	8585	11	5.166	13.546	
8325	15	9.515	22.687	8442	14	15.604	4.498	8514	25	14.345	9.741	8586	13	6.336	13.001	
8326	15	9.543	22.232	8443	14	15.970	4.636	8515	16	14.904	9.680	8587	15	7.922	13.246	
8327	15	10.558	22.046	8444	10	19.146	4.182	8516	25	15.945	9.757	8588	11	15.494	13.530	
8328	9	13.042	22.534	8445*	45	19.545	4.250	8517	28	17.038	9.078	8589	9	15.750	13.218	
8329	29	17.576	22.474	8446	8	19.771	4.598	8518	28	18.286	9.626	8590	15	18.980	13.336	
8330	10	17.791	22.609	8447	45	19.940	4.384	8519	25	19.876	9.892	8591	18	20.048	13.806	
8331	48	20.076	22.910	8448	9	20.719	4.950	8520	24	25.596	9.607	8592	37	20.318	13.936	
8332	23	4.875	23.406	8449	35	21.484	4.973	8521*	44	2.277	10.630	8593	11	21.750	13.102	
8333	10	8.435	23.468	8450	12	22.190	4.527	8522	24	4.964	10.956	8594	28	22.688	13.316	
8334*	65	12.787	23.044	8451	30	25.112	4.938	8523	15	6.092	10.518	8595	17	22.948	13.558	
8335	8	13.482	23.050	8452	24	0.000	5.726	8524	18	6.649	10.855	8596	33	23.338	13.081	
8336	21	14.520	23.312	8453	11	6.485	5.058	8525	8	7.916	10.683	8597	9	24.724	13.985	
8337	8	20.964	23.589	8454	12	8.672	5.793	8526	11	9.916	10.062	8598	20	0.749	14.048	
8338	9	21.915	23.408	8455	9	10.369	5.632	8527	21	12.215	10.029	8599	8	1.758	14.827	
8339	16	23.247	23.908	8456	22	13.906	5.761	8528	12	16.224	10.916	8600	12	3.606	14.120	
8340	21	23.771	23.580	8457	11	14.047	5.756	8529	28	17.570	10.810	8601	27	4.576	14.063	
8341	19	23.885	23.307	8458	10	14.100	5.924	8530	10	17.814	10.048	8602	12	5.029	14.020	
8342	23	25.943	23.498	8459*	47	16.266	5.920	8531	12	19.046	10.840	8603	8	10.742	14.040	
8343	36	0.126	24.818	8460	18	17.946	5.534	8532	9	19.401	10.180	8604	13	11.112	14.134	
8344	19	1.801	24.853	8461	14	18.468	5.452	8533	8	20.271	10.320	8605	22	12.205	14.226	
8345	14	4.638	24.736	8462	21	19.912	5.986	8534*	50	22.225	10.266	8606	17	15.026	14.206	
8346	12	5.051	24.806	8463	26	1.665	6.462	8535	35	22.988	10.780	8607	10	15.332	14.188	
8347	33	5.873	24.293	8464	22	1.714	6.582	8536	12	25.525	10.653	8608	17	17.068	14.108	
8348	12	12.386	24.958	8465	30	7.294	6.921	8537	37	1.997	11.266	8609	10	17.975	14.616	
8349*	67	12.990	24.476	8466	32	8.802	6.799	8538	29	2.416	11.198	8610	31	19.310	14.010	
8350	14	13.686	24.036	8467	12	12.600	6.724	8539	12	2.576	11.456	8611	15	19.584	14.336	
8351*	62	15.774	24.900	8468	11	15.330	6.231	8540	11	4.884	11.518	8612	23	20.604	14.312	
8352	24	21.838	24.281	8469	20	16.488	6.147	8541	12	7.441	11.664	8613	11	21.931	14.172	
8353	40	25.132	24.704	8470	24	16.936	6.100	8542	20	9.575	11.880	8614*	42	21.970	14.481	
8354	13	3.157	25.780	8471	23	18.854	6.845	8543	17	12.063	11.892	8615	19	22.026	14.448	
8355	62	11.330	25.580	8472	19	19.003	6.766	8544	20	12.137	11.165	8616*	43	24.373	14.024	
8356	12	11.621	25.447	8473	15	21.128	6.484	8545	22	13.399	11.824	8617	18	0.560	15.945	
8357	39	12.674	25.824	8474	15	23.280	6.258	8546	9	14.628	11.914	8618	35	0.594	15.396	
8358	8	13.895	25.883	8475	31	23.714	6.826	8547	28	17.854	11.581	8619	27	0.976	15.540	
8359	14	14.201	25.816	8476	14	23.726	6.820	8548	9	18.140	11.038	8620	35	1.280	15.691	
8360	9	17.164	25.832	8477	14	2.118	7.180	8549	15	19.844	11.717	8621	35	4.262	15.558	
8361	14	22.048	25.760	8478	26	2.862	7.916	8550	9	23.856	11.200	8622	15	4.334	15.474	
8362	18	23.756	25.506	8479	17	8.680	7.770	8551	16	0.146	12.575	8623	12	6.897	15.180	
8363	17	24.879	25.716	8480	23	8.880	7.924	8552	38	0.296	12.688	8624	13	7.320	15.339	
8364	37	24.940	25.515	8481	11	9.790	7.963	8553	8	1.682	12.164	8625	17	8.784	15.231	
8365	37	25.188	25.122	8482	11	12.712	7.977	8554	18	2.456	12.403	8626	19	9.775	15.144	
				8483	9	14.404	7.650	8555	21	2.762	12.347	8627	13	9.786	15.504	
				8484*	46	14.689	7.218	8556*	42	3.556	12.354	8628	36	15.845	15.482	
				8485	35	20.842	7.585	8557	10	5.097	12.059	8629	10	16.925	15.215	
				8486	17	25.216	7.417	8558	10	5.839	12.390	8630	9	21.372	15.784	
				8487	9	3.616	8.894	8559	33	6.265	12.315	8631	18	21.698	15.626	
				8488	9	6.645	8.092	8560	19	9.126						



8642*	42	13.936	16.739	8714	26	0.768	20.944	8786	10	16.736	23.346	8838	12	6.959	2.579	8910	20	5.266	9.473
8643	19	14.894	16.411	8715	36	3.700	20.265	8787	13	16.788	23.988	8839	15	9.252	2.862	8911	15	5.524	9.446
8644	11	15.609	16.558	8716	9	4.272	20.230	8788	14	17.554	23.820	8840	32	11.075	2.330	8912	11	5.549	9.004
8645	34	18.810	16.146	8717	8	6.913	20.421	8789	8	19.180	23.271	8841	16	12.244	2.280	8913	28	7.042	9.521
8646	26	19.110	16.546	8718	15	7.464	20.196	8790	28	24.754	23.916	8842	14	12.276	2.533	8914	9	11.672	9.438
8647	13	19.486	16.700	8719	33	8.584	20.810	8791	40	3.125	24.724	8843	14	12.748	2.952	8915	12	11.940	9.264
8648	31	21.078	16.281	8720	26	10.952	20.247	8792	12	3.932	24.646	8844	17	13.064	2.924	8916	10	13.944	9.956
8649	33	23.154	16.493	8721	23	11.718	20.816	8793	13	4.516	24.256	8845	10	13.156	2.736	8917	18	14.413	9.572
8650	8	23.343	16.311	8722	36	13.328	20.199	8794	20	11.986	24.202	8846*	34	21.622	2.617	8918	22	14.982	9.752
8651	13	23.686	16.996	8723	20	15.276	20.180	8795	22	12.056	24.153	8847	20	22.324	2.154	8919	36	22.757	9.441
8652	18	0.616	17.488	8724	20	15.302	20.436	8796	13	12.785	24.436	8848	26	25.898	2.000	8920	31	0.762	10.874
8653	32	3.300	17.522	8725	10	16.602	20.530	8797	37	13.298	24.488	8849	14	2.422	3.204	8921	14	3.296	10.710
8654	10	4.701	17.292	8726	20	18.528	20.719	8798	18	15.332	24.016	8850	15	4.702	3.589	8922	13	8.102	10.117
8655	41	8.301	17.333	8727	11	19.048	20.056	8799	28	20.306	24.973	8851	13	11.596	3.802	8923	17	12.216	10.354
8656	31	9.925	17.549	8728	40	20.386	20.658	8800	33	24.714	24.564	8852	14	13.484	3.161	8924	14	14.013	10.711
8657	11	10.500	17.078	8729	35	21.996	20.845	8801	12	0.045	25.800	8853	13	17.388	3.163	8925	26	18.108	10.668
8658	31	11.135	17.698	8730	16	0.258	21.735	8802	25	1.755	25.532	8854*	50	24.242	3.832	8926	27	18.214	10.846
8659	33	17.926	17.300	8731	37	0.362	21.723	8803	22	2.882	25.733	8855	16	25.462	3.825	8927	11	18.492	10.294
8660	16	19.986	17.359	8732	10	0.514	21.500	8804	37	2.942	25.535	8856	28	5.234	4.050	8928	32	20.866	10.142
8661	12	20.125	17.052	8733	15	1.466	21.576	8805	40	3.184	25.140	8857	17	10.307	4.098	8929	15	21.062	10.714
8662	25	21.046	17.256	8734	11	1.932	21.938	8806	36	6.045	25.918	8858*	38	10.356	4.912	8930*	36	21.920	10.672
8663	32	21.586	17.614	8735	26	2.425	21.516	8807	19	7.099	25.624	8859	13	10.754	4.358	8931	13	24.178	10.249
8664	34	21.616	17.734	8736	39	3.796	21.628	8808	22	17.790	25.227	8860	10	12.398	4.367	8932	17	5.104	11.814
8665	10	22.182	17.548	8737	9	4.412	21.370	8809	20	20.825	25.629	8861	27	15.989	4.732	8933	18	6.051	11.294
8666	11	22.260	17.436	8738	10	7.182	21.300	8810	10	23.664	25.352	8862	25	18.330	4.722	8934	16	8.273	11.838
8667	43	23.516	17.666	8739	12	9.624	21.264	8811	27	25.106	25.480	8863	13	19.279	4.448	8935	21	8.391	11.452
8668	39	0.295	18.524	8740	16	10.158	21.847					8864	19	24.287	4.065	8936	18	8.394	11.664
8669	8	2.244	18.280	8741	37	13.182	21.674					8865	10	24.414	4.706	8937	9	10.144	11.086
8670	15	3.074	18.604	8742	12	13.826	21.295					8866	19	2.802	5.002	8938	12	10.446	11.670
8671	10	7.458	18.072	8743	9	16.286	21.964					8867	12	5.888	5.163	8939	23	13.278	11.071
8672	25	7.792	18.604	8744	21	17.398	21.375					8868	15	9.132	5.398	8940	10	13.368	11.434
8673	14	9.453	18.784	8745	24	18.279	21.173					8869	21	10.521	5.650	8941	21	18.482	11.795
8674	11	11.012	18.926	8746	11	18.458	21.680					8870*	36	20.486	5.984	8942	14	18.528	11.245
8675	16	12.008	18.606	8747	21	18.944	21.730					8871	16	23.179	5.424	8943	26	19.668	11.896
8676	32	14.696	18.896	8748	34	20.418	21.708					8872	12	0.995	6.349	8944	13	0.446	12.274
8677	30	17.123	18.756	8749	16	20.640	21.963					8873	28	1.430	6.909	8945*	37	0.494	12.319
8678	25	17.752	18.590	8750*	60	23.806	21.733					8874*	37	4.176	6.910	8946	36	0.718	12.665
8679	10	19.299	18.114	8751	10	25.655	21.126					8875	14	5.799	6.172	8947	22	1.378	12.784
8680	29	19.431	18.103	8752	29	25.901	21.027					8876	17	8.182	6.583	8948	20	1.640	12.758
8681	19	20.514	18.310	8753	13	2.830	22.854					8877	30	16.476	6.514	8949	10	6.462	12.708
8682	10	20.829	18.066	8754	10	5.196	22.150					8878*	34	18.893	6.074	8950	13	6.522	12.784
8683	27	21.065	18.946	8755	23	6.592	22.810					8879	29	20.446	6.063	8951	10	9.812	12.784
8684	17	21.173	18.982	8756	15	7.423	22.836					8880	9	24.316	6.227	8952	12	11.208	12.596
8685	39	22.129	18.412	8757	33	10.188	22.049					8881	14	2.942	7.478	8953*	36	13.131	12.700
8686	22	0.372	19.994	8758	23	12.546	22.982					8882	11	5.252	7.869	8954	12	15.442	12.450
8687*	46	1.278	19.084	8759	10	12.736	22.800					8883	18	5.274	7.700	8955	21	16.244	12.624
8688	42	1.323	19.624	8760	8	13.958	22.724					8884	9	5.294	7.225	8956	26	20.162	12.147
8689	23	2.348	19.083	8761	36	15.782	22.110					8885	20	6.584	7.236	8957	28	22.318	12.449
8690	11	3.040	19.158	8762	20	17.084	22.114					8886	10	8.076	7.940	8958	10	23.382	12.514
8691	12	3.300	19.315	8763	28	18.537	22.594					8887	14	10.596	7.443	8959	12	23.851	12.091
8692	29	5.326	19.464	8764	40	21.710	22.460					8888	12	12.307	7.444	8960	19	0.500	13.412
8693	11	5.364	19.623	8765	10	23.358	22.574					8889	15	13.127	7.312	8961	12	0.764	13.654
8694	27	6.372	19.495	8766	21	23.718	22.186					8890	8	14.583	7.485	8962	18	1.148	13.167
8695	16	7.675	19.160	8767	20	24.694	22.986					8891	11	16.444	7.074	8963	21	4.841	13.120
8696	15	10.396	19.710	8768	19	24.752	22.863					8892	20	17.082	7.799	8964	12	8.115	13.984
8697	10	11.648	19.391	8769	23	1.234	23.939					8893	11	20.346	7.105	8965	14	14.259	13.424
8698	15	11.848	19.234	8770	27	1.756	23.606					8894	16	25.130	7.098	8966	8	15.969	13.798
8699	23	12.012	19.231	8771	27	1.867	23.334					8895	16	1.644	8.994	8967	24	18.358	13.988
8700	10	12.326	19.997	8772	10	2.788	23.264					8896	8	2.808	8.660	8968	23	19.938	13.040
8701	17	12.663	19.570	8773	32	3.929	23.512					8897	18	4.320	8.879	8969	8	21.728	13.870
8702	28	13.164	19.520	8774	34	6.144	23.756					8898*	33	7.591	8.114	8970	36	24.551	13.014
8703	25	13.338	19.882	8775	27	6.323	23.314					8899	13	10.024	8.180	8971*	37	2.194	14.096
8704	24	13.688	19.664	8776	15	7.746	23.165					8900	24	10.992	8.523	8972	11	6.900	14.181
8705	24	14.250	19.750	8777	29	10.610	23.092					8901	8	12.356	8.970	8973	11	7.365	14.153
8706	10	14.946	19.696	8778*	37	10.782	23.088					8902	16	14.034	8.626	8974	12	10.884	14.129
8707	12	15.280	19.690	8779	13	12.184	23.222					8903	15	16.262	8.134	8975	13	11.675	14.056
8708	9	17.234	19.497	8780	12	12.930	23.530					8904	10	19.562	8.645	8976	12	12.104	14.602
8709	33	18.149	19.566	8781	16	15.706	23.365					8905	29	20.886	8.434	8977	18	14.049	14.796
8710	18	18.954	19.850	8782	10	15.744	23.948					8906							



8982	25	18.710	14.754	9054	10	4.683	21.040	R.A. 5 <sup>h</sup> 8 <sup>m</sup>  Plate 879; 1916 Nov. 30.  Provisional Constants.  A            B            C -02546 -00111 +2297  D            E            F +00125 -02584 -2309  Mag. = 16.5 - 1.09√d	9171	10	14.134	4.857	9243*	65	15.756	8.671
8983	12	20.082	14.251	9055	26	5.740	21.822		9172	18	14.652	4.974	9244	10	18.646	8.804
8984	14	20.852	14.006	9056	17	8.970	21.266		9173	19	15.075	4.904	9245	10	19.826	8.404
8985*	37	21.789	14.554	9057	13	9.560	21.500		9174*	42	15.156	4.036	9246	12	21.958	8.800
8986	13	1.854	15.776	9058	13	10.667	21.640		9175	40	16.549	4.458	9247	8	22.537	8.515
8987	26	3.042	15.224	9059	12	11.801	21.305		9176	9	16.935	4.035	9248	36	23.920	8.106
8988*	30	4.146	15.226	9060	16	12.925	21.122		9177	12	17.119	4.045	9249	41	0.656	9.319
8989	15	7.084	15.858	9061*	30	13.232	21.555		9178	9	22.608	4.787	9250*	75	7.804	9.974
8990	10	7.134	15.607	9062	19	14.951	21.145		9179	12	23.124	4.785	9251	18	8.878	9.055
8991	8	7.614	15.693	9063	15	19.396	21.924		9180	9	0.691	5.776	9252	11	9.484	9.237
8992	18	7.795	15.314	9064	22	22.632	21.476	9181	16	1.042	5.295	9253	8	15.905	9.832	
8993*	33	9.634	15.662	9065	23	24.034	21.642	9182	10	9.144	5.350	9254	19	18.754	9.398	
8994	11	11.366	15.446	9066	37	24.362	21.442	9183	8	10.214	5.121	9255	23	23.922	9.676	
8995	13	13.188	15.836	9067	15	1.661	22.266	9184*	41	11.248	5.226	9256	13	2.088	10.115	
8996	10	15.510	15.862	9068	12	2.705	22.931	9185	8	11.359	5.774	9257	9	4.704	10.654	
8997	28	20.904	15.929	9069	10	5.114	22.584	9186	11	11.822	5.614	9258	9	7.732	10.939	
8998	17	21.027	15.950	9070	10	5.137	22.126	9187	31	12.376	5.020	9259	9	8.298	10.558	
8999	21	1.009	16.579	9071*	60	6.084	22.046	9188	28	12.584	5.114	9260	8	11.384	10.012	
9000	12	6.587	16.276	9072	26	6.248	22.694	9189	8	14.478	5.242	9261*	47	13.884	10.409	
9001	14	8.195	16.245	9073	8	6.368	22.798	9190	14	15.783	5.862	9262	23	16.294	10.799	
9002	20	8.538	16.050	9074	14	6.748	22.646	9191	9	17.508	5.126	9263	22	19.272	10.163	
9003*	28	10.394	16.676	9075	16	11.337	22.124	9192	16	18.482	5.598	9264	8	22.789	10.626	
9004	13	10.404	16.483	9076	26	17.040	22.978	9193	15	19.710	5.732	9265	11	25.320	10.334	
9005	18	15.134	16.658	9077	13	19.054	22.746	9194	9	20.027	5.634	9266	10	25.584	10.615	
9006	22	18.774	16.836	9078	32	25.927	22.620	9195	14	21.368	5.468	9267	15	1.780	11.963	
9007	37	1.390	17.753	9079	16	2.647	23.050	9196	41	22.046	5.960	9268	9	9.690	11.152	
9008	8	7.474	17.348	9080	20	2.725	23.984	9197	9	2.188	6.092	9269	11	9.774	11.737	
9009	28	9.320	17.064	9081	23	4.913	23.123	9198	15	3.008	6.955	9270	12	11.801	11.066	
9010	16	10.157	17.350	9082	28	7.542	23.826	9199	10	5.260	6.440	9271	10	14.832	11.454	
9011	13	10.411	17.479	9083	10	7.560	23.193	9200	16	8.239	6.393	9272	37	17.864	11.899	
9012	14	10.711	17.900	9084	13	7.905	23.594	9201	17	9.634	6.686	9273	19	19.682	11.068	
9013	26	12.390	17.172	9085	15	9.294	23.165	9202	9	9.826	6.633	9274	17	22.370	11.714	
9014	12	13.830	17.374	9086	24	11.474	23.266	9203	10	10.815	6.632	9275	38	0.247	12.334	
9015	12	17.040	17.098	9087	17	14.968	23.378	9204	20	11.554	6.094	9276	9	1.315	12.384	
9016	15	17.671	17.136	9088	34	17.092	23.629	9205	15	11.906	6.077	9277	42	2.483	12.876	
9017	10	18.620	17.656	9089	14	17.148	23.538	9206	22	12.574	6.660	9278	8	3.142	12.038	
9018	8	19.580	17.334	9090	36	19.559	23.069	9207	41	13.975	6.878	9279	10	3.400	12.350	
9019	23	20.232	17.288	9091	11	19.586	23.056	9208	10	15.056	6.063	9280	35	5.545	12.614	
9020	26	20.280	17.523	9092	17	22.606	23.539	9209	10	16.456	6.406	9281	15	7.604	12.654	
9021	13	21.714	17.636	9093	17	23.392	23.594	9210*	46	18.690	6.636	9282	17	7.612	12.644	
9022	15	21.964	17.602	9094	10	23.904	23.379	9211	11	19.226	6.074	9283	20	12.077	12.110	
9023	34	0.014	18.515	9095	30	24.278	23.288	9212	8	21.186	6.124	9284	20	15.796	12.296	
9024	19	7.390	18.576	9096	12	25.330	23.566	9213	8	23.092	6.068	9285	28	19.516	12.970	
9025	15	12.514	18.836	9097	18	25.599	23.966	9214	9	24.538	6.984	9286	10	20.164	12.276	
9026	19	12.612	18.651	9098	20	2.696	24.632	9215	8	25.436	6.648	9287	8	20.475	12.348	
9027	16	13.726	18.102	9099	12	5.658	24.142	9216	9	5.845	7.263	9288	9	21.298	12.584	
9028	8	18.603	18.539	9100	15	9.887	24.741	9217	8	7.144	7.490	9289	10	21.590	12.146	
9029*	62	20.580	18.807	9101	11	16.586	24.590	9218	21	7.250	7.156	9290	16	22.099	12.116	
9030	14	21.580	18.194	9102	9	17.455	24.758	9219	24	7.550	7.064	9291	11	24.061	12.860	
9031	16	22.870	18.717	9103	11	18.762	24.740	9220	15	7.822	7.713	9292	11	24.294	12.334	
9032	20	23.832	18.816	9104	29	19.984	24.798	9221	10	7.900	7.746	9293	8	25.213	12.640	
9033	10	5.690	19.899	9105	13	21.316	24.864	9222	26	7.920	7.748	9294	8	2.182	13.764	
9034	15	8.600	19.095	9106	21	3.102	25.542	9223	10	8.418	7.351	9295	8	2.262	13.790	
9035	27	9.427	19.800	9107	25	4.756	25.352	9224	9	8.668	7.404	9296	9	4.256	13.304	
9036	11	9.574	19.308	9108	17	8.496	25.614	9225	12	9.654	7.385	9297	28	5.172	13.091	
9037	14	11.514	19.715	9109	25	10.348	25.757	9226	42	11.348	7.184	9298	8	8.086	13.980	
9038	17	13.918	19.441	9110	13	13.152	25.688	9227	10	12.942	7.526	9299	9	9.596	13.482	
9039	17	14.398	19.670	9111	17	15.600	25.482	9228	13	15.894	7.114	9300*	42	13.484	13.832	
9040	11	18.398	19.350	9112	14	19.516	25.452	9229	10	17.363	7.081	9301	32	15.403	13.703	
9041	34	19.899	19.930	9113	16	25.558	25.200	9230	38	18.418	7.490	9302	17	15.503	13.224	
9042	11	22.874	19.854					9231	10	18.669	7.486	9303	8	15.652	13.587	
9043	12	7.132	20.423					9232	10	19.386	7.024	9304	8	15.700	13.896	
9044*	50	10.115	20													



9315	9	13.475	14.140	9387	39	16.599	20.264	<div>R.A. 5<sup>h</sup> 16<sup>m</sup></div> <div>Plate 914 ; 1916 Dec. 17.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>−02561 +00039 +1795</div> <div>D E F</div> <div>−00046 −02588 −1040</div> <div>Mag.=16.3−1.09√<i>d</i></div>	9516	23	12.486	4.056	9588	27	23.818	10.329
9316	9	17.469	14.782	9388	38	19.302	20.660		9517	8	12.549	4.298	9589	22	24.380	10.716
9317	8	19.667	14.324	9389	8	21.308	20.754		9518	20	17.684	4.846	9590	14	24.847	10.126
9318*	62	21.284	14.515	9390	8	25.702	20.550		9519	16	18.653	4.964	9591	35	25.151	10.996
9319	12	21.632	14.092	9391	17	25.931	20.498		9520	13	20.665	4.963	9592	52	25.945	10.376
9320	12	21.958	14.094	9392	35	0.652	21.358		9521	38	21.346	4.216	9593	21	0.204	11.825
9321	9	3.937	15.955	9393	9	1.820	21.687		9522	15	21.736	4.654	9594	22	7.578	11.436
9322	39	5.450	15.290	9394	39	2.059	21.510		9523	30	8.530	5.116	9595	15	10.881	11.006
9323	11	6.832	15.776	9395	40	2.382	21.307		9524	17	16.094	5.400	9596	13	11.026	11.346
9324	9	8.796	15.816	9396	8	7.124	21.965		9525	16	22.542	5.214	9597*	32	17.122	11.815
9325*	43	9.422	15.718	9397	17	14.955	21.356	9526	13	3.208	6.718	9598	28	20.480	11.194	
9326*	45	9.464	15.776	9398	19	16.103	21.020	9527	21	4.229	6.416	9599	35	21.024	11.734	
9327	18	11.337	15.064	9399	37	16.819	21.226	9528	9	4.871	6.550	9600	17	23.996	11.848	
9328	9	12.010	15.336	9400	19	17.794	21.576	9529*	37	6.233	6.172	9601	40	24.008	11.887	
9329	17	18.653	15.230	9401	10	17.846	21.517	9530	24	9.564	6.256	9602	13	24.126	11.884	
9330	10	20.162	15.727	9402	15	18.102	21.326	9531	23	10.902	6.849	9603	13	25.762	11.636	
9331	36	20.320	15.614	9403	11	19.861	21.154	9532	18	11.197	6.642	9604	16	1.909	12.948	
9332	8	20.444	15.872	9404	12	20.516	21.256	9533	12	12.070	6.570	9605	16	2.134	12.418	
9333	9	22.478	15.664	9405	13	20.556	21.314	9534	10	12.092	6.129	9606	10	2.756	12.428	
9334	8	2.370	16.840	9406	8	22.036	21.872	9535	26	12.644	6.317	9607	25	5.424	12.825	
9335	15	4.226	16.058	9407	10	22.714	21.844	9536	17	14.005	6.324	9608	17	5.622	12.559	
9336	8	4.474	16.748	9408	34	25.154	21.032	9537	13	19.426	6.704	9609	11	5.680	12.718	
9337	9	5.618	16.580	9409	41	3.960	22.470	9538	34	22.048	6.784	9610	30	5.722	12.208	
9338	12	8.005	16.190	9410	13	5.018	22.690	9539	8	24.982	6.892	9611	25	7.874	12.304	
9339	12	11.092	16.064	9411	17	6.300	22.036	9540	10	25.792	6.370	9612	10	8.326	12.664	
9340	12	13.119	16.864	9412	9	9.886	22.164	9541	14	2.311	7.067	9613	16	10.390	12.772	
9341	15	16.326	16.008	9413	8	9.888	22.500	9542	34	2.673	7.661	9614	25	12.562	12.784	
9342	13	18.884	16.575	9414	14	12.292	22.874	9543	14	8.458	7.993	9615	16	14.348	12.970	
9343	38	23.152	16.871	9415	9	18.267	22.857	9544	12	9.324	7.462	9616	13	14.824	12.214	
9344	17	23.418	16.459	9416	8	23.362	22.603	9545*	36	10.002	7.654	9617	15	19.976	12.216	
9345	8	4.455	17.039	9417	8	25.482	22.898	9546	26	10.944	7.916	9618	19	20.563	12.187	
9346	8	4.539	17.956	9418	15	0.648	23.421	9547	14	11.392	7.388	9619	20	21.368	12.752	
9347	34	5.122	17.858	9419	15	1.436	23.470	9548	12	11.676	7.920	9620	16	25.640	12.355	
9348	11	9.723	17.354	9420	11	1.944	23.246	9549	12	13.110	7.992	9621	15	0.098	13.312	
9349	16	10.968	17.860	9421	37	2.316	23.154	9550	16	13.668	7.834	9622	16	1.499	13.434	
9350	10	11.064	17.466	9422	12	3.369	23.422	9551	25	17.119	7.683	9623	32	1.678	13.562	
9351	15	11.092	17.083	9423	22	3.649	23.822	9552	29	23.341	7.637	9624	22	7.015	13.302	
9352	8	14.088	17.472	9424	19	5.400	23.692	9553	9	24.751	7.993	9625	13	8.060	13.956	
9353	15	15.132	17.894	9425	32	7.978	23.461	9554	30	1.706	8.200	9626	15	8.764	13.901	
9354	8	17.196	17.724	9426	25	8.824	23.216	9555	17	6.789	8.954	9627	32	14.572	13.514	
9355	10	18.982	17.886	9427	25	9.164	23.750	9556	13	6.822	8.910	9628	11	16.324	13.730	
9356	36	25.678	17.916	9428	11	11.216	23.051	9557*	82	9.814	8.165	9629	21	19.459	13.308	
9357	18	0.862	18.595	9429	18	15.884	23.885	9558	80	9.852	8.044	9630	22	19.480	13.516	
9358	31	1.827	18.687	9430	14	17.634	23.550	9559	12	10.952	8.966	9631	36	7.046	14.810	
9359	11	2.422	18.210	9431	16	18.210	23.994	9560	15	12.966	8.174	9632	29	8.520	14.784	
9360	31	4.995	18.822	9432	10	20.221	23.536	9561	12	15.162	8.520	9633	11	8.842	14.832	
9361	11	4.994	18.872	9433	42	24.680	23.688	9562	9	18.924	8.836	9634	20	9.383	14.966	
9362	19	11.956	18.646	9434	48	25.979	23.185	9563	26	19.006	8.770	9635	15	10.671	14.064	
9363	11	12.144	18.404	9435	9	1.348	24.510	9564	36	22.391	8.574	9636	16	11.946	14.080	
9364	34	12.384	18.122	9436	9	1.974	24.034	9565	23	1.728	9.770	9637	13	13.724	14.839	
9365*	44	13.601	18.188	9437	12	5.572	24.760	9566*	47	5.226	9.880	9638	20	14.664	14.882	
9366	19	15.494	18.204	9438	9	6.354	24.382	9567	17	5.552	9.084	9639	15	16.267	14.266	
9367	12	16.867	18.036	9439	14	6.424	24.292	9568*	42	6.288	9.292	9640	22	17.524	14.168	
9368	36	20.050	18.548	9440	11	7.066	24.156	9569	16	11.556	9.625	9641	26	18.154	14.358	
9369	11	23.484	18.560	9441	8	7.305	24.119	9570	24	13.619	9.234	9642	33	19.621	14.166	
9370	13	0.875	19.730	9442	13	11.266	24.286	9571	15	15.604	9.036	9643	16	19.694	14.941	
9371	38	5.899	19.829	9443	18	13.048	24.912	9572	13	19.826	9.270	9644	24	21.118	14.792	
9372	14	12.048	19.036	9444	13	17.176	24.648	9573	13	20.242	9.506	9645	17	22.683	14.558	
9373	11	12.146	19.632	9445	14	18.035	24.846	9574	14	21.242	9.396	9646	34	24.748	14.386	
9374	39	13.944	19.808	9446	38	18.368	24.046	9575	15	21.949	9.701	9647	15	0.362	15.774	
9375	11	16.635	19.489	9447	11	20.296	24.866	9576	30	24.612	9.213	9648	11	3.354	15.401	
9376	11	19.304	19.950	9448	8	21.448	24.770	9577	18	3.134	10.408	9649	16	8.		



9660	17	1.314	16.554	9732*	56	14.478	21.782	9785	23	24.492	0.916	9857	15	6.982	6.955	9929	15	6.059	10.446
9661	14	5.486	16.303	9733	19	15.069	21.995	9786	15	4.624	1.414	9858	16	9.276	6.096	9930	16	7.770	10.048
9662	19	9.208	16.015	9734	22	15.322	21.873	9787	12	6.394	1.188	9859	13	10.194	6.928	9931	8	8.943	10.050
9663	10	10.091	16.876	9735	14	16.157	21.644	9788	11	7.338	1.264	9860	20	11.964	6.085	9932	25	9.326	10.765
9664	17	15.912	16.714	9736	25	19.016	21.364	9789	12	9.508	1.782	9861	17	12.620	6.899	9933	11	9.774	10.591
9665	19	16.548	16.812	9737	18	3.462	22.966	9790*	56	11.667	1.737	9862	8	15.123	6.545	9934	13	11.513	10.606
9666	14	16.786	16.780	9738	17	4.284	22.406	9791	17	15.260	1.256	9863	10	17.505	6.852	9935	15	14.029	10.408
9667	17	17.450	16.420	9739	9	9.360	22.627	9792	18	15.856	1.725	9864	19	19.394	6.937	9936	9	14.186	10.518
9668	16	20.846	16.099	9740	16	9.440	22.806	9793	21	23.919	1.714	9865	16	21.168	6.192	9937	8	14.488	10.578
9669	15	22.258	16.035	9741	15	10.621	22.166	9794	19	24.964	1.046	9866	8	23.688	6.304	9938	14	14.524	10.818
9670	20	22.703	16.427	9742	18	18.051	22.265	9795	10	0.420	2.332	9867	29	25.574	6.666	9939	12	15.849	10.838
9671*	58	24.380	16.182	9743	21	18.972	22.990	9796*	34	1.418	2.842	9868	28	1.276	7.563	9940	9	17.518	10.300
9672	10	2.143	17.201	9744	13	19.916	22.890	9797	32	3.056	2.834	9869	16	7.908	7.464	9941	12	18.156	10.956
9673	24	3.591	17.983	9745	18	21.378	22.916	9798	8	5.732	2.990	9870	8	8.656	7.108	9942	16	18.861	10.275
9674	14	5.927	17.502	9746	37	22.846	22.734	9799	30	12.729	2.331	9871	26	9.052	7.448	9943	9	18.908	10.236
9675	16	6.162	17.928	9747	36	2.669	23.764	9800	14	13.186	2.957	9872	10	9.532	7.154	9944	14	19.516	10.602
9676	8	9.232	17.830	9748	36	3.958	23.245	9801	11	15.291	2.321	9873	14	13.022	7.620	9945	13	2.003	11.762
9677	9	11.160	17.579	9749	12	5.354	23.581	9802	11	17.137	2.535	9874	11	13.196	7.086	9946	34	2.016	11.802
9678	19	11.334	17.083	9750*	36	9.345	23.912	9803	22	19.058	2.604	9875	21	13.884	7.036	9947	9	2.136	11.794
9679	15	11.791	17.310	9751	29	12.908	23.254	9804	20	19.736	2.956	9876*	36	15.054	7.414	9948	10	3.239	11.864
9680	14	12.850	17.404	9752	14	13.024	23.182	9805*	36	21.883	2.787	9877	15	15.074	7.024	9949	10	3.764	11.524
9681	30	14.360	17.002	9753	20	16.138	23.652	9806	11	22.465	2.119	9878	9	16.642	7.834	9950	12	4.538	11.979
9682	10	14.868	17.515	9754*	64	19.076	23.972	9807	11	22.750	2.204	9879	9	20.618	7.716	9951	13	5.077	11.376
9683	24	19.106	17.384	9755*	56	19.124	23.697	9808	27	25.408	2.947	9880	23	21.254	7.811	9952	9	6.140	11.461
9684	16	20.982	17.218	9756	19	19.378	23.486	9809	15	2.210	3.244	9881	8	21.638	7.502	9953	9	6.852	11.610
9685*	46	22.946	17.086	9757	36	20.192	23.755	9810	13	3.561	3.256	9882	32	23.345	7.947	9954	10	8.561	11.485
9686*	47	23.812	17.154	9758	12	3.004	24.444	9811	16	4.400	3.348	9883	36	0.342	8.514	9955	11	8.596	11.193
9687	16	5.239	18.806	9759	34	3.268	24.771	9812	17	5.620	3.588	9884	11	4.172	8.934	9956	8	8.948	11.296
9688	9	6.980	18.589	9760	39	16.995	24.398	9813	9	8.846	3.768	9885	17	5.342	8.078	9957	14	10.884	11.550
9689	17	7.456	18.917	9761	36	18.315	24.334	9814	10	9.882	3.449	9886	22	9.806	8.485	9958	10	12.449	11.661
9690	23	8.737	18.390	9762	19	19.566	24.290	9815*	36	10.500	3.283	9887	15	10.606	8.984	9959	12	12.802	11.544
9691	19	9.633	18.325	9763	19	23.409	24.810	9816	36	11.495	3.242	9888	14	13.256	8.008	9960	20	13.754	11.986
9692	13	11.176	18.115	9764	21	6.959	25.594	9817	20	13.769	3.455	9889	8	13.924	8.874	9961	13	15.107	11.084
9693*	38	13.259	18.490	9765	21	10.184	25.382	9818	11	15.725	3.053	9890	14	14.434	8.056	9962	12	16.634	11.299
9694	28	13.834	18.182	9766	20	11.928	25.528	9819	11	18.942	3.803	9891	9	14.634	8.502	9963	10	17.614	11.066
9695	26	15.668	18.604	9767	46	19.146	25.868	9820	23	19.208	3.963	9892	9	15.056	8.544	9964	16	17.690	11.610
9696	17	18.532	18.528	9768	19	20.901	25.372	9821	22	23.282	3.782	9893	9	15.058	8.806	9965	17	17.822	11.514
9697	28	18.578	18.430	9769	34	21.259	25.325	9822	14	4.270	4.846	9894*	42	17.938	8.112	9966	18	19.044	11.162
9698	37	19.126	18.764	9770	36	25.798	25.734	9823	37	4.984	4.159	9895*	36	18.504	8.516	9967	18	19.044	11.977
9699	17	23.238	18.276					9824	16	8.613	4.671	9896	18	19.148	8.222	9968	14	19.715	11.854
9700	24	23.487	18.887					9825	10	10.506	4.464	9897*	38	19.396	8.691	9969	22	24.856	11.325
9701	86	25.696	18.026					9826	26	13.255	4.918	9898	19	20.455	8.145	9970	14	3.654	12.240
9702	21	1.466	19.561					9827	11	13.722	4.610	9899	16	20.944	8.108	9971	13	5.854	12.000
9703	27	3.340	19.259					9828	22	19.846	4.834	9900	36	20.968	8.111	9972	8	8.287	12.359
9704*	45	5.540	19.318					9829	13	20.348	4.728	9901	10	21.452	8.578	9973	16	11.005	12.908
9705	9	9.665	19.567					9830	10	21.799	4.704	9902	23	22.838	8.187	9974	15	12.900	12.868
9706	17	10.588	19.870					9831	36	23.104	4.382	9903	9	24.693	8.966	9975	22	13.136	12.052
9707*	34	12.768	19.764					9832	12	23.172	4.766	9904	15	24.934	8.032	9976	21	14.452	12.860
9708	19	12.985	19.804					9833	18	25.840	4.466	9905	27	2.574	9.114	9977	20	15.086	12.338
9709	14	13.820	19.070					9834	17	0.441	5.154	9906	36	4.950	9.975	9978	17	19.950	12.334
9710*	36	15.276	19.256					9835	12	4.095	5.846	9907	18	5.784	9.094	9979	12	19.956	12.865
9711	15	16.870	19.673					9836	26	4.136	5.816	9908	40	5.815	9.538	9980	14	22.342	12.467
9712	13	21.698	19.840					9837	11	4.654	5.927	9909	13	8.393	9.273	9981	32	22.676	12.773
9713	20	24.912	19.462					9838	10	8.964	5.754	9910*	36	12.275	9.394	9982	9	23.216	12.108
9714	18	0.942	20.020					9839	14	9.848	5.358	9911	10	12.431	9.676	9983	12	2.972	13.368
9715	13	3.651	20.616					9840	24	11.794	5.812	9912	15	13.442	9.140	9984	11	6.168	13.308
9716	28	3.876	20.560					9841	8	12.638	5.874	9913	18	13.808	9.097	9985	15	7.224	13.406
9717	28	6.712	20.526					9842	18	13.129	5.424	9914	14	14.425	9.064	9986	9	7.425	13.848
9718	18	9.414	20.390					9843	14	13.874	5.284	9915	8	15.757	9.252	9987*	34	9.524	13.730
9719	13	9.764	20.225					9844	11	15.380	5.454	9916	12	18.756	9.936	9988	22	9.988	13.472
9720	16	13.710	20.372					9845	8	18.850	5.484	9917	12	19.104	9.556	9989	8	11.276	13.386
9721	16	14.581	20.246					9846	30	20.026	5.242	9918	16	20.114	9.193	9990	11	12.914	13.386
9722	17	16.336	20.596					9847	17	21.879	5.818	9919	9	22.013	9.462	9991	10	13.570	13.546
9723	11	16.975	20.582					9848	12	21.979	5.658	9920*	44	22.258	9.932	9992	14	13.772	13.363
9724	25	18.151	20.575					9849	14	23.554	5.064	9921	12	23.988	9.562	9993	13	14.758	13.706
9725	29	20.568	20.715					9850	12	23.794	5.540	9922	17	25.051	9.110	9994	14	15.174	13.264
9726	20	21.186	20.295					9851	11	2.904	6.792	9923	26	1.799	10.245	9995	10	16.328	13.744
9727	12	25.954	20.620				</												



10001	16	22.748	13.304	10073	12	1.718	17.876	10145	24	7.158	21.192	10256	14	4.759	4.350
10002	10	23.208	13.326	10074*	36	1.904	17.066	10146	22	7.865	21.756	10257	20	7.510	4.310
10003	13	24.304	13.410	10075*	76	3.795	17.912	10147	10	12.285	21.216	10258	19	17.905	4.768
10004	23	24.408	13.588	10076	15	4.256	17.926	10148	15	13.255	21.345	10259	13	18.777	4.696
10005	8	25.594	13.735	10077	26	4.504	17.490	10149	32	17.879	21.030	10260	10	18.967	4.923
10006	13	0.734	14.494	10078	10	5.329	17.566	10150	40	19.148	21.195	10261	18	21.207	4.408
10007	25	2.794	14.290	10079	16	8.840	17.617	10151	28	19.326	21.335	10262	18	21.854	4.421
10008	34	4.648	14.132	10080	12	9.402	17.656	10152	10	21.427	21.774	10263	11	23.372	4.075
10009	18	4.668	14.074	10081	14	10.034	17.572	10153	8	25.171	21.649	10264	16	25.535	4.978
10010	12	5.723	14.287	10082	10	10.562	17.238	10154	28	1.037	22.665	10265	13	1.252	5.120
10011	16	6.506	14.598	10083	15	13.018	17.290	10155	9	3.504	22.918	10266	10	1.380	5.721
10012	17	7.834	14.546	10084	15	13.354	17.144	10156	38	4.452	22.808	10267	14	1.490	5.594
10013	10	8.838	14.740	10085	9	14.368	17.224	10157	33	4.874	22.615	10268	9	4.694	5.326
10014	11	8.920	14.624	10086	10	15.736	17.531	10158	22	7.638	22.466	10269*	74	6.864	5.440
10015	22	8.970	14.002	10087	9	15.933	17.988	10159	8	11.962	22.982	10270	16	8.526	5.940
10016*	56	9.794	14.542	10088	8	17.582	17.790	10160	8	12.952	22.204	10271	27	10.596	5.811
10017	24	10.578	14.345	10089	11	21.506	17.502	10161	8	14.503	22.142	10272	11	11.428	5.314
10018	15	11.876	14.475	10090	8	21.584	17.238	10162	30	18.442	22.154	10273	14	12.570	5.508
10019	10	13.422	14.924	10091	24	21.944	17.766	10163	11	19.235	22.292	10274	27	13.323	5.338
10020	15	13.818	14.025	10092	18	22.322	17.452	10164	16	21.870	22.376	10275	9	15.968	5.820
10021	14	14.818	14.292	10093	9	24.803	17.382	10165	11	22.928	22.607	10276	12	16.629	5.852
10022*	44	14.938	14.992	10094	10	25.748	17.231	10166	28	25.486	22.272	10277	31	19.016	5.817
10023	14	15.409	14.334	10095	15	1.352	18.200	10167	9	1.551	23.332	10278	10	20.182	5.562
10024	13	16.714	14.918	10096	20	1.608	18.808	10168	36	7.266	23.600	10279	29	21.150	5.472
10025	18	17.306	14.276	10097	15	5.995	18.033	10169	40	9.298	23.850	10280	25	21.465	5.156
10026	22	18.116	14.378	10098	17	7.556	18.550	10170	29	11.365	23.028	10281	25	21.650	5.730
10027	28	18.776	14.844	10099	36	8.544	18.148	10171*	38	13.093	23.856	10282	10	22.556	5.273
10028	10	18.952	14.792	10100	8	8.723	18.036	10172	18	14.022	23.495	10283*	40	25.130	5.796
10029	8	19.220	14.056	10101	21	8.732	18.150	10173	8	15.336	23.488	10284	16	25.359	5.165
10030	13	19.748	14.579	10102	22	8.934	18.204	10174	24	16.876	23.968	10285	12	25.513	5.386
10031	19	22.543	14.349	10103	11	10.750	18.514	10175	12	0.566	24.288	10286	9	1.398	6.358
10032	25	23.218	14.755	10104	10	11.509	18.643	10176	17	1.636	24.734	10287	32	3.284	6.700
10033	11	23.451	14.264	10105	19	11.662	18.977	10177	10	6.832	24.921	10288*	39	5.737	6.726
10034*	44	24.694	14.448	10106	16	12.056	18.338	10178	38	12.014	24.238	10289	28	5.750	6.030
10035	36	25.915	14.177	10107	10	12.766	18.064	10179	8	12.916	24.634	10290	28	6.563	6.484
10036	16	0.334	15.978	10108	8	14.024	18.842	10180	10	16.814	24.744	10291	11	6.839	6.874
10037	12	1.083	15.352	10109	9	14.284	18.754	10181	11	18.112	24.002	10292	8	7.286	6.987
10038	10	2.436	15.046	10110	16	16.628	18.498	10182	10	18.411	24.886	10293	12	7.486	6.965
10039	25	5.842	15.619	10111	13	17.005	18.091	10183	13	18.702	24.226	10294	13	7.670	6.342
10040	11	5.866	15.682	10112	8	17.194	18.702	10184	10	22.325	24.004	10295	23	8.844	6.786
10041	20	6.142	15.833	10113	14	17.779	18.592	10185	18	22.566	24.616	10296	11	9.336	6.625
10042	27	7.468	15.756	10114	11	18.635	18.544	10186	38	24.295	24.088	10297	10	10.860	6.429
10043	19	8.117	15.524	10115	27	19.743	18.162	10187	9	25.067	24.523	10298	28	11.776	6.145
10044	12	8.656	15.134	10116*	37	19.744	18.233	10188	37	4.042	25.618	10299	17	12.074	6.218
10045	16	9.286	15.642	10117	9	20.362	18.561	10189	13	7.037	25.645	10300	27	13.666	6.492
10046	11	13.336	15.515	10118	12	22.038	18.421	10190	10	8.641	25.770	10301	10	14.988	6.728
10047	13	13.458	15.415	10119	10	22.908	18.300	10191	40	8.690	25.225	10302	10	16.624	6.719
10048	17	14.012	15.878	10120	17	3.048	19.358	10192	19	13.410	25.079	10303	18	16.882	6.665
10049	15	15.134	15.965	10121*	46	7.351	19.360	10193	15	14.404	25.746	10304	10	16.976	6.668
10050	11	24.076	15.224	10122	11	8.425	19.280	10194	36	15.481	25.504	10305	41	19.623	6.153
10051	10	24.420	15.480	10123	10	11.994	19.367	10195	13	15.646	25.230	10306	12	19.930	6.586
10052	15	0.785	16.364	10124*	33	12.949	19.474	10196	36	18.324	25.961	10307	11	21.250	6.358
10053*	40	2.452	16.087	10125	36	14.586	19.776	10197	38	19.054	25.084	10308	12	24.415	6.194
10054	10	3.622	16.104	10126	22	15.036	19.378	10198	11	24.822	25.100	10309	10	25.515	6.738
10055	14	4.606	16.966	10127	32	16.840	19.768					10310	11	6.424	7.280
10056*	37	4.867	16.824	10128	12	17.248	19.152					10311	20	7.242	7.838
10057	10	6.488	16.404	10129	16	20.770	19.184					10312	21	8.761	7.670
10058	11	7.833	16.549	10130	8	21.171	19.106					10313	16	9.476	7.615
10059	14	8.632	16.348	10131	11	21.582	19.972					10314	26	15.440	7.110
10060	15	9.644	16.884	10132	24	24.061	19.631					10315	14	15.722	7.712
10061	10	11.374	16.198	10133	32	24.977	19.823					10316	25	16.272	7.069
10062	12	13.738	16.783	10134	15	25.514	19.940					10317*	41	16.282	7.063
10063	20	13.981	16.578	10135	13	4.112	20.406					10318	40	16.870	7.794
10064	14	16.098	16.510	10136	8	4.316	20.071					10319	9	19.052	7.383
10065	12	16.136	16.830	10137	10	6.223	20.592					10320	20	19.458	7.450
10066*	36	18.448	16.516	10138	13	8.644	20.894					10321	15	20.476	7.757
10067	19	18.464	16.464	10139	28	13.019	20.994					10322	11	20.600	7.309
10068	14	21.116	16.940	10140	18	15.924	20.974					10323	10	20.946	7.912
10069*	40	21.740	16.683	10141	31	19.510	20.317					10324*	47	22.624	7.480
10070	12	22.554	16.313	10142	17	22.774	20.446					10325	12	24.136	7.084
10071	18	22.592	16.576	10143*	56	6.554	21.549					10326	14	25.191	7.971
10072*	37	1.038	17.016	10144*	78	6.614	21.616					10327	20	0.564	8.253

R.A. 5<sup>h</sup> 32<sup>m</sup>

Plate 916; 1916 Dec. 18.

Provisional Constants.

A	B	C
-02585	+00439	+1643

D	E	F
-00448	-02577	-2724

Mag. = 16.5 - 1.09√d

No.	d	x	y
10201	26	2.151	0.960
10202	10	4.537	0.402
10203	15	5.820	0.758
10204	14	6.964	0.586
10205	11	11.640	0.216
10206	22	12.526	0.916
10207	14	12.720	0.036
10208	28	13.771	0.302
10209	23	14.636	0.644
10210	11	14.835	0.014
10211	13	21.298	0.464
10212	30	24.108	0.436
10213	19	1.584	1.764
10214	18	2.624	1.088
10215	16	4.444	1.435
10216	26	6.948	1.920
10217	12	7.834	1.465
10218	17	8.356	1.236
10219	25	11.482	1.772
10220	17	12.304	1.860
10221	11	13.200	1.130
10222	15	16.884	1.091
10223	12	22.640	1.474
10224	11	0.024	2.255
10225	10	0.136	2.187
10226	13	0.423	2.266
10227	10	1.913	2.380
10228	24	3.086	2.984
10229	19	6.842	2.280
10230	17	9.938	2.984
10231	23	12.150	2.255
10232	12	12.958	2.154
10233	12	15.446	2.222
10234	20	15.460	2.299
10235	14	16.715	2.935
10236	10	16.966	2.299
10237	10	16.986	2.242
10238	11	24.830	2.055
10239	19	0.963	3.830
10240	10	2.826	3.561
10241	14	4.629	3.817
10242	12	5.216	3.858
10243*	43	5.450	3.811
10244	12	9.551	3.427
10245	14	11.332	3.648
10246	13	12.735	3.666
10247	15	16.744	3.101
10248*	51	18.938	3.403
10249	9	21.982	3.034
10250	10	23.706	3.149
10251	25	24.764	3.441
10252	9	25.501	3.305
10253	32	0.793	4.441
10254	10	0.868	4.828
10255	19	3.533	4.499



10328	22	1.068	8.008	10400	15	9.877	11.821	10472	12	1.240	14.324	10544	11	19.042	17.597	10616	11	19.758	20.254
10329	12	2.661	8.074	10401	13	10.590	11.117	10473*	46	2.478	14.491	10545	10	20.422	17.348	10617	13	20.802	20.722
10330*	42	4.135	8.101	10402	11	11.164	11.156	10474*	39	3.700	14.210	10546	8	23.217	17.646	10618	14	21.936	20.530
10331	17	5.812	8.788	10403	12	11.555	11.686	10475	24	5.717	14.657	10547	19	24.598	17.936	10619	11	23.886	20.309
10332	8	5.848	8.989	10404	12	12.246	11.460	10476	18	5.964	14.676	10548	15	25.720	17.573	10620*	49	23.978	20.786
10333	11	6.434	8.640	10405	10	12.477	11.950	10477	8	6.998	14.964	10549	10	0.733	18.364	10621	14	25.333	20.800
10334	20	6.610	8.213	10406	10	14.254	11.415	10478	12	7.440	14.152	10550	10	3.610	18.259	10622	9	3.784	21.224
10335	12	7.246	8.882	10407*	47	14.958	11.970	10479	10	7.918	14.780	10551	11	4.300	18.160	10623	12	5.473	21.584
10336	17	7.710	8.790	10408	15	15.960	11.792	10480	23	8.086	14.389	10552*	52	5.950	18.240	10624	16	6.230	21.608
10337	12	7.772	8.232	10409	27	17.600	11.644	10481	11	8.726	14.910	10553*	37	6.127	18.034	10625	29	8.475	21.545
10338	9	11.185	8.070	10410	10	17.708	11.333	10482	8	8.890	14.142	10554	12	7.878	18.170	10626	11	11.550	21.406
10339	8	11.664	8.917	10411	10	18.812	11.601	10483	13	12.044	14.403	10555	10	8.759	18.020	10627	9	12.656	21.388
10340	12	12.454	8.482	10412	10	18.838	11.000	10484	25	13.938	14.049	10556	13	10.414	18.616	10628	16	13.822	21.467
10341	10	12.916	8.226	10413	10	20.601	11.886	10485	10	14.632	14.537	10557	17	10.915	18.712	10629	20	15.751	21.600
10342	24	14.855	8.230	10414	18	20.738	11.392	10486	20	15.368	14.650	10558	8	13.192	18.839	10630	10	15.784	21.158
10343	11	17.174	8.622	10415	19	21.678	11.778	10487	12	16.917	14.034	10559	35	13.792	18.308	10631	10	17.727	21.316
10344	11	20.180	8.043	10416*	40	22.925	11.913	10488	9	19.719	14.208	10560	16	13.844	18.040	10632	20	18.128	21.934
10345	10	21.022	8.346	10417	11	23.370	11.500	10489	11	20.940	14.675	10561	10	16.150	18.547	10633	9	18.590	21.670
10346	16	23.098	8.634	10418	25	24.306	11.521	10490	41	23.022	14.272	10562	18	17.866	18.214	10634	10	19.968	21.730
10347	10	23.588	8.916	10419	17	24.756	11.130	10491	11	23.784	14.816	10563	10	19.080	18.636	10635	20	20.734	21.850
10348	11	24.452	8.750	10420	15	24.864	11.976	10492	11	1.874	15.274	10564	13	20.017	18.480	10636	16	21.382	21.716
10349	9	25.582	8.140	10421	14	25.338	11.358	10493	10	1.885	15.977	10565	25	20.465	18.794	10637	21	21.659	21.789
10350	10	0.052	9.126	10422	10	0.114	12.537	10494	9	2.224	15.526	10566	15	21.338	18.090	10638	24	25.200	21.699
10351	14	1.730	9.613	10423	36	0.444	12.835	10495	10	4.592	15.304	10567	12	22.290	18.514	10639	11	0.802	22.666
10352	11	2.430	9.012	10424	11	0.984	12.169	10496*	37	9.384	15.371	10568	22	1.900	19.680	10640	29	3.358	22.307
10353	16	2.786	9.151	10425	10	3.898	12.490	10497	13	9.952	15.561	10569	11	1.954	19.829	10641	12	7.360	22.197
10354	13	4.780	9.670	10426	13	4.254	12.409	10498	13	10.650	15.570	10570	24	2.818	19.861	10642	12	10.880	22.145
10355	10	5.224	9.562	10427	11	4.806	12.516	10499	19	11.653	15.440	10571	15	3.360	19.974	10643	11	11.554	22.743
10356*	53	5.535	9.448	10428	15	5.616	12.458	10500	10	11.754	15.820	10572	16	4.276	19.866	10644	9	12.247	22.120
10357	9	6.665	9.860	10429	19	9.690	12.060	10501	11	13.328	15.312	10573	10	7.237	19.900	10645	12	13.319	22.282
10358	9	7.332	9.440	10430	12	10.976	12.326	10502	22	14.539	15.593	10574	11	7.458	19.536	10646	16	15.734	22.978
10359	13	8.936	9.478	10431	11	12.116	12.010	10503	19	18.518	15.148	10575	23	7.563	19.337	10647	10	16.829	22.550
10360	25	10.006	9.972	10432	9	12.880	12.646	10504	10	21.911	15.108	10576	11	9.138	19.738	10648	10	17.300	22.348
10361	11	10.310	9.001	10433	9	14.340	12.092	10505*	62	23.823	15.560	10577	15	16.350	19.708	10649	10	17.455	22.214
10362	16	11.344	9.014	10434	10	14.558	12.320	10506	13	24.200	15.490	10578	22	16.904	19.961	10650	21	17.648	22.562
10363	18	11.660	9.666	10435	11	14.685	12.531	10507	21	24.356	15.438	10579	19	17.514	19.184	10651	25	18.018	22.325
10364*	47	12.123	9.522	10436	20	16.766	12.375	10508	11	25.470	15.819	10580	16	18.302	19.420	10652	25	19.826	22.292
10365	22	12.804	9.964	10437	14	17.062	12.108	10509	10	0.356	16.378	10581	10	18.524	19.284	10653*	62	21.440	22.198
10366	27	13.710	9.694	10438	9	18.551	12.738	10510	21	0.400	16.641	10582	10	20.950	19.350	10654	11	21.541	22.982
10367	22	14.254	9.852	10439	11	18.656	12.196	10511	10	4.337	16.174	10583	10	21.092	19.824	10655	10	22.842	22.326
10368	13	17.509	9.032	10440	11	19.650	12.668	10512*	51	4.788	16.658	10584	23	21.327	19.498	10656	16	5.766	23.015
10369*	46	17.964	9.665	10441	12	20.322	12.786	10513	11	7.026	16.450	10585	23	22.520	19.392	10657	17	6.389	23.300
10370	10	18.232	9.428	10442	12	24.475	12.992	10514	14	8.620	16.001	10586	18	23.752	19.530	10658	10	6.721	23.471
10371	10	18.870	9.014	10443	10	24.498	12.237	10515	9	9.030	16.572	10587	12	24.172	19.170	10659	35	7.725	23.678
10372	15	21.428	9.976	10444	10	25.821	12.786	10516	9	9.822	16.000	10588	18	25.050	19.871	10660	18	9.096	23.784
10373*	40	22.038	9.715	10445	12	25.879	12.230	10517	27	11.365	16.018	10589	11	25.836	19.166	10661	10	9.156	23.568
10374	16	23.138	9.659	10446	13	0.528	13.370	10518	11	11.461	16.876	10590	10	0.176	20.000	10662	33	12.540	23.506
10375	13	23.650	9.375	10447	9	0.584	13.709	10519	10	13.062	16.150	10591	13	0.623	20.508	10663	29	13.247	23.430
10376*	42	24.256	9.988	10448	10	0.983	13.388	10520	11	15.202	16.922	10592	10	1.855	20.616	10664	24	13.712	23.922
10377	49	0.000	10.000	10449	14	2.084	13.460	10521	10	15.818	16.696	10593	27	3.929	20.754	10665	10	14.660	23.365
10378	8	2.134	10.330	10450	22	2.188	13.635	10522	10	23.901	16.467	10594	13	4.676	20.647	10666*	66	14.798	23.914
10379	9	3.650	10.742	10451	8	2.399	13.532	10523	14	24.182	16.295	10595	10	4.990	20.901	10667*	59	14.810	23.106
10380*	53	7.060	10.976	10452	10	3.378	13.768	10524	18	24.640	16.300	10596	10	5.170	20.780	10668	13	15.462	23.365
10381	11	7.722	10.068	10453	9	5.452	13.902	10525	14	0.146	17.517	10597	9	5.464	20.564	10669	17	15.868	23.168
10382	10	8.866	10.534	10454	8	5.544	13.380	10526	11	2.320	17.671	10598	16	5.230	20.496	10670	26	15.885	23.420
10383	13	9.943	10.346	10455	12	6.602	13.232	10527	12	2.624	17.424	10599	12	7.156	20.474	10671	18	18.793	23.040
10384	13	12.580	10.823	10456	10	6.957	13.350	10528	14	3.566	17.264	10600	9	7.266	20.306	10672	17	21.120	23.856
10385	20	17.230	10.744	10457	19	8.203	13.734	10529	13	4.118	17.450	10601	10	7.981	20.889	10673	10	21.428	23.474
10386	14	17.410	10.893	10458	11	9.970	13.310	10530	40	4.316	17.186	10602	35	8.096	20.040	10674	27	22.066	23.434
10387	10	18.542	10.972	10459	10	10.570	13.107	10531	11	4.558	17.238	10603	10	8.629	20.532	10675	10	22.352	23.004
10388	10	18.579	10.445	10460	15	11.114	13.390	10532	13	4.819	17.460	10604	8	9.428	20.272	10676	10	23.700	23.196
10389	13	19.549	10.412	10461	12	14.951	13.542	10533	10	8.314	17.962	10605	10	9.478	20.260	10677	15	0.462	24.680
10390	12	21.466	10.398																



10688	10	22.834	24.146	10780	18	11.286	2.106	10852	13	2.352	6.290	10924	12	2.684	10.270	10996	11	14.112	13.973
10689	10	23.952	24.022	10781	14	12.071	2.070	10853	12	3.458	6.823	10925	36	3.988	10.964	10997	12	14.879	13.758
10690	10	25.676	24.000	10782	11	12.200	2.732	10854	12	4.066	6.776	10926	23	5.598	10.319	10998	18	16.158	13.516
10691	13	2.726	25.146	10783*	31	12.385	2.004	10855	22	4.206	6.874	10927	10	6.480	10.264	10999	8	16.524	13.996
10692	10	4.000	25.046	10784*	44	13.884	2.158	10856*	46	4.236	6.708	10928	10	6.722	10.560	11000	8	17.344	13.588
10693	16	5.870	25.820	10785	11	15.695	2.614	10857	8	5.293	6.462	10929	14	8.312	10.062	11001	12	20.740	13.597
10694	33	7.312	25.308	10786	13	16.037	2.445	10858	8	5.722	6.153	10930	24	9.296	10.548	11002	16	23.436	13.544
10695	10	10.504	25.740	10787	12	17.004	2.709	10859	33	6.334	6.034	10931	23	9.603	10.648	11003*	52	24.199	13.020
10696	10	10.700	25.944	10788*	37	20.046	2.120	10860	20	6.859	6.800	10932	13	11.762	10.371	11004	9	24.498	13.490
10697	24	12.311	25.844	10789	9	20.888	2.258	10861	8	8.392	6.584	10933	9	17.350	10.831	11005	42	1.036	14.383
10698	36	12.585	25.073	10790	10	21.138	2.996	10862	35	8.702	6.400	10934	14	18.368	10.204	11006	12	1.810	14.918
10699	10	16.748	25.391	10791	28	21.482	2.566	10863	38	9.560	6.415	10935	12	18.557	10.170	11007	10	1.954	14.134
10700	13	17.120	25.790	10792*	26	23.596	2.949	10864	14	9.942	6.016	10936	11	18.848	10.272	11008	8	4.878	14.380
10701	10	19.562	25.640	10793	8	1.266	3.773	10865	25	10.794	6.688	10937	12	19.329	10.604	11009	16	9.237	14.146
10702	13	20.016	25.362	10794	10	1.614	3.252	10866	12	12.322	6.204	10938	8	19.742	10.363	11010	12	9.376	14.553
10703	13	20.062	25.562	10795	27	2.673	3.533	10867	14	12.560	6.574	10939	24	20.598	10.566	11011	13	10.150	14.165
10704	9	20.773	25.427	10796	11	3.412	3.386	10868	23	15.037	6.708	10940	26	23.661	10.525	11012	35	10.876	14.864
10705	17	21.667	25.806	10797	11	3.644	3.337	10869	10	15.642	6.842	10941	12	1.360	11.606	11013	9	11.059	14.389
10706	33	25.076	25.536	10798	9	5.440	3.728	10870	23	19.263	6.560	10942	28	2.294	11.618	11014	10	12.526	14.798
				10799	14	6.877	3.748	10871	33	21.738	6.492	10943	11	2.594	11.080	11015	12	12.671	14.608
				10800	15	8.970	3.177	10872*	37	0.570	7.594	10944	18	2.744	11.221	11016	29	14.373	14.212
				10801	18	11.564	3.870	10873	10	2.080	7.182	10945	13	3.328	11.446	11017	8	14.391	14.497
				10802	8	13.940	3.830	10874	8	4.769	7.640	10946	16	5.202	11.945	11018	14	14.602	14.978
				10803	8	14.698	3.276	10875*	91	10.172	7.729	10947	34	6.387	11.486	11019	25	17.103	14.647
				10804	25	15.354	3.463	10876	9	10.350	7.468	10948	10	6.390	11.228	11020	8	17.216	14.174
				10805	11	17.872	3.864	10877	16	11.674	7.248	10949	17	9.026	11.308	11021	12	17.446	14.770
				10806	17	18.292	3.677	10878	8	11.865	7.802	10950	17	11.101	11.134	11022	12	20.482	14.454
				10807	25	18.591	3.191	10879	18	12.042	7.999	10951	20	11.144	11.653	11023	10	23.906	14.675
				10808*	59	20.582	3.062	10880	13	12.716	7.200	10952	9	11.670	11.543	11024	8	24.086	14.242
				10809	15	23.096	3.405	10881	17	13.070	7.986	10953	14	12.000	11.913	11025*	61	1.849	15.660
				10810	9	24.754	3.589	10882	22	15.618	7.192	10954	11	12.183	11.566	11026	13	2.230	15.590
				10811	8	1.293	4.182	10883	20	17.608	7.740	10955	32	12.346	11.120	11027	22	2.386	15.534
				10812	8	4.822	4.312	10884	8	19.482	7.957	10956	10	13.682	11.864	11028	12	3.506	15.902
				10813	17	5.723	4.612	10885	13	19.970	7.082	10957	12	14.438	11.553	11029	21	4.454	15.438
				10814	24	6.904	4.996	10886	10	20.627	7.554	10958	11	15.202	11.261	11030	9	4.478	15.073
				10815	13	6.980	4.002	10887	16	21.376	7.972	10959	13	17.218	11.048	11031	9	4.938	15.280
				10816	10	8.613	4.417	10888	8	23.890	7.764	10960	29	19.833	11.128	11032	19	6.090	15.214
				10817	17	9.106	4.454	10889	16	1.058	8.744	10961	8	20.062	11.258	11033	21	7.614	15.641
				10818*	55	12.098	4.534	10890	10	2.418	8.844	10962	11	22.577	11.773	11034	11	7.861	15.300
				10819	8	13.161	4.895	10891	13	3.145	8.058	10963	15	22.618	11.789	11035	19	8.013	15.677
				10820	11	15.486	4.398	10892	10	3.542	8.221	10964	18	25.348	11.704	11036	12	9.976	15.692
				10821	12	17.680	4.608	10893	10	9.301	8.214	10965*	39	0.916	12.024	11037	12	11.569	15.440
				10822	10	18.335	4.276	10894	17	11.296	8.878	10966	15	2.858	12.067	11038	10	11.790	15.502
				10823*	45	18.433	4.762	10895	11	12.241	8.300	10967	11	3.828	12.868	11039	10	15.965	15.056
				10824	15	18.444	4.437	10896	21	13.987	8.886	10968	14	3.876	12.308	11040	14	18.976	15.707
				10825	14	19.678	4.686	10897	13	15.700	8.788	10969	11	4.674	12.684	11041	17	20.020	15.452
				10826	11	20.752	4.676	10898	8	17.523	8.713	10970	9	4.798	12.483	11042	18	20.070	15.818
				10827	10	21.188	4.441	10899	21	18.748	8.701	10971	36	4.874	12.028	11043	34	22.433	15.686
				10828	10	22.380	4.014	10900	13	21.882	8.488	10972*	36	6.512	12.772	11044	8	1.944	16.568
				10829	15	23.150	4.790	10901*	43	22.573	8.262	10973	8	9.045	12.802	11045	17	2.222	16.392
				10830*	35	3.059	5.888	10902	16	24.725	8.681	10974	13	12.817	12.936	11046	20	2.682	16.396
				10831	16	3.284	5.250	10903	11	24.874	8.536	10975	8	12.942	12.264	11047	8	3.745	16.166
				10832	12	3.444	5.473	10904	40	0.004	9.835	10976	15	13.094	12.934	11048	9	4.033	16.768
				10833	10	3.450	5.870	10905	14	1.112	9.766	10977	13	14.008	12.381	11049	11	9.933	16.122
				10834	17	3.458	5.062	10906	11	1.618	9.481	10978	16	14.306	12.387	11050	18	10.092	16.925
				10835*	53	8.697	5.464	10907	12	3.989	9.478	10979*	41	14.542	12.924	11051	8	12.084	16.684
				10836	17	9.074	5.528	10908	19	4.644	9.066	10980	11	18.075	12.328	11052	15	13.159	16.146
				10837	16	9.408	5.200	10909	10	10.574	9.806	10981*	44	19.390	12.384	11053	10	13.184	16.719
				10838	8	9.876	5.068	10910	12	11.086	9.627	10982	8	19.952	12.450	11054	14	13.210	16.218
				10839	27	9.893	5.760	10911	9	11.242	9.298	10983	8	20.390	12.494	11055	12	13.547	16.144
				10840	12	10.208	5.978	10912	15	11.354	9.154	10984	8	21.374	12.936	11056	15	14.214	16.941
				10841	10	13.292	5.001	10913	9	12.741	9.738	10985*	42	21.685	12.506	11057	10	14.378	16.750
				10842	35	15.162	5.899	10914	9	16.702	9.984	10986	12	22.241	12.130	11058	34	15.783	16.470
				10843	8	16.263	5.766	10915*	43	17.788	9.050	10987	24	22.938	12.836	11059	8	16.153	16.690
				10844	19	18.608	5.260	10916	14	20.902	9.334	10988	10	23.826	12.037	11060	15	16.682	16.008
				10845	12	18.607	5.648	10917	13	21.353	9.358	10989	12	24.206	12.136	11061	34	16.745	16.356
				10846	8	18.970	5.112	10918	10	22.288	9.500	10990	10	0.198	13.992	11062	34	16.893	16.862
				10847	37	19.740	5.595	10919	17	22.425	9.908	10991	14	2.480	13.088	11063	41	16.938	16.110
				10848	33	19.831	5.706												



11068	16	5.424	17.302	11140	15	9.402	20.376	11212	9	18.193	24.198	11286	24	8.614	2.246	11358	14	15.026	5.156
11069	13	8.702	17.214	11141*	58	11.594	20.524	11213	16	19.784	24.434	11287	24	11.548	2.033	11359	18	15.067	5.006
11070	12	9.503	17.878	11142	12	12.141	20.826	11214	20	20.008	24.666	11288	18	11.732	2.871	11360	13	15.739	5.907
11071	8	11.342	17.545	11143	26	14.466	20.528	11215	24	22.974	24.444	11289	10	11.894	2.487	11361	16	16.805	5.105
11072	8	11.763	17.756	11144	16	15.348	20.995	11216*	61	23.654	24.738	11290	26	11.923	2.497	11362	30	17.774	5.424
11073	9	12.564	17.327	11145	26	18.248	20.335	11217	39	3.212	25.625	11291	24	11.965	2.398	11363	34	18.006	5.844
11074	17	13.360	17.340	11146	15	18.356	20.198	11218	27	5.417	25.222	11292	17	13.096	2.322	11364	32	20.828	5.224
11075	12	16.590	17.286	11147	12	19.283	20.618	11219	26	7.751	25.216	11293	15	13.570	2.163	11365	18	21.132	5.094
11076	23	17.367	17.460	11148	20	20.147	20.288	11220	8	9.403	25.464	11294	24	15.309	2.831	11366	36	21.338	5.150
11077	45	17.746	17.616	11149	33	20.325	20.072	11221	20	9.924	25.281	11295	26	15.936	2.640	11367	30	22.711	5.452
11078	33	18.660	17.462	11150	31	20.402	20.650	11222	9	14.683	25.848	11296*	42	16.852	2.783	11368	52	25.846	5.858
11079	21	18.940	17.300	11151	10	21.234	20.460	11223	45	15.965	25.586	11297	14	18.713	2.037	11369	18	6.537	6.321
11080	8	19.583	17.540	11152	16	22.575	20.924	11224	10	20.883	25.383	11298	38	20.344	2.291	11370	36	8.335	6.754
11081	10	19.686	17.754	11153	22	23.526	20.698					11299	26	20.742	2.384	11371	17	10.626	6.456
11082	9	20.023	17.812	11154	19	25.736	20.139					11300	24	23.544	2.772	11372	15	12.642	6.879
11083	8	22.432	17.156	11155	31	3.296	21.786					11301	36	0.722	3.618	11373	16	12.867	6.244
11084	30	22.451	17.176	11156	16	7.485	21.392					11302*	39	1.217	3.153	11374	18	13.080	6.436
11085	8	24.101	17.581	11157	17	8.580	21.288					11303	16	2.381	3.783	11375	28	15.152	6.764
11086	8	0.352	18.633	11158	8	9.536	21.882					11304	14	4.083	3.593	11376	19	15.302	6.677
11087	21	2.654	18.031	11159	8	11.627	21.273					11305	19	4.918	3.776	11377	28	19.995	6.746
11088	26	4.628	18.312	11160	20	13.768	21.324					11306	17	5.636	3.272	11378	30	21.496	6.692
11089	33	6.214	18.318	11161	11	14.688	21.752					11307	24	6.965	3.935	11379	17	24.063	6.314
11090	9	9.027	18.325	11162	13	14.750	21.013					11308	22	7.164	3.528	11380	17	1.552	7.964
11091	10	10.070	18.682	11163	10	18.956	21.711					11309	34	8.426	3.288	11381	16	3.552	7.870
11092	8	11.883	18.586	11164	12	19.642	21.056					11310	36	8.974	3.861	11382	37	4.462	7.196
11093	10	11.920	18.116	11165	13	21.538	21.616					11311	19	9.204	3.240	11383	36	5.692	7.857
11094	31	12.040	18.689	11166	9	21.569	21.156					11312	44	9.230	3.132	11384	17	6.013	7.365
11095	11	12.390	18.398	11167	8	23.536	21.272					11313	14	12.364	3.463	11385	20	7.344	7.966
11096	13	12.402	18.348	11168	12	24.274	21.734					11314	16	12.716	3.315	11386	14	9.016	7.850
11097*	37	13.514	18.690	11169	13	25.676	21.482					11315	15	13.250	3.775	11387	19	9.524	7.034
11098	36	13.568	18.406	11170	8	25.794	21.142					11316	16	14.794	3.882	11388	20	10.258	7.826
11099	26	13.793	18.762	11171	9	0.947	22.436					11317	41	20.458	3.021	11389	17	14.448	7.431
11100	8	14.269	18.852	11172	39	6.486	22.748					11318	21	22.105	3.134	11390	11	15.038	7.565
11101	18	14.734	18.697	11173	8	8.214	22.830					11319	23	0.010	4.228	11391	17	15.712	7.062
11102	10	15.140	18.640	11174	8	8.980	22.515					11320	26	0.788	4.998	11392	17	16.613	7.324
11103	10	17.830	18.440	11175	12	9.223	22.424					11321	14	1.984	4.853	11393	34	18.498	7.434
11104	14	19.972	18.112	11176	8	10.006	22.390					11322	22	5.106	4.534	11394	21	20.708	7.745
11105	20	21.790	18.664	11177	12	10.436	22.070					11323	15	5.559	4.676	11395	17	20.878	7.615
11106	9	22.523	18.300	11178	12	14.154	22.966					11324	28	6.124	4.433	11396	14	22.756	7.289
11107	12	22.650	18.762	11179	33	14.257	22.432					11325	26	6.365	4.295	11397	20	23.713	7.554
11108	8	23.246	18.090	11180	12	15.122	22.656					11326*	56	6.596	4.475	11398	60	25.443	7.936
11109	26	0.589	19.504	11181	9	16.026	22.211					11327	18	9.122	4.376	11399	58	0.235	8.474
11110	26	1.828	19.634	11182	11	16.408	22.750					11328	37	14.408	4.226	11400	14	1.133	8.362
11111	14	2.242	19.270	11183	9	19.473	22.602					11329	14	15.022	4.615	11401	32	2.398	8.874
11112	10	2.964	19.412	11184	32	21.167	22.902					11330	20	15.149	4.265	11402	23	2.548	8.728
11113	20	3.126	19.960	11185	25	23.340	22.941					11331	21	15.261	4.857	11403*	42	6.012	8.981
11114	12	3.908	19.249	11186	17	23.429	22.500					11332	24	15.455	4.776	11404	32	6.062	8.492
11115	13	4.720	19.184	11187	8	25.534	22.304					11333	36	15.756	4.422	11405	17	8.559	8.470
11116	13	5.818	19.267	11188	25	0.180	23.554					11334	38	15.864	4.268	11406*	42	8.680	8.305
11117	9	9.594	19.664	11189	8	0.463	23.124					11335	22	16.957	4.766	11407	16	8.854	8.780
11118	18	11.864	19.860	11190	9	11.477	23.281					11336	13	17.344	4.467	11408	17	9.499	8.884
11119*	57	12.400	19.542	11191	10	12.692	23.150					11337	32	18.330	4.474	11409	16	10.899	8.882
11120	10	13.926	19.230	11192	8	14.224	23.578					11338	21	19.598	4.040	11410	18	11.861	8.836
11121	11	13.997	19.578	11193	11	15.758	23.977					11339	19	20.050	4.186	11411	18	12.370	8.078
11122	27	14.760	19.766	11194	12	17.638	23.388					11340	18	20.200	4.714	11412	14	13.563	8.912
11123	18	17.299	19.456	11195	10	18.748	23.420					11341	18	20.632	4.286	11413	22	16.077	8.631
11124	10	17.716	19.520	11196	10	19.339	23.682					11342	21	24.884	4.534	11414	16	16.742	8.292
11125	13	17.821	19.743	11197	20	22.206	23.922					11343*	80	24.976	4.424	11415	19	17.114	8.584
11126	26	18.374	19.308	11198	8	22.329	23.767					11344	18	25.087	4.758	11416	16	17.332	8.117
11127	15	19.140	19.062	11199	22	24.464	23.543					11345	42	25.179	4.962	11417	28	19.272	8.117
11128	30	21.898	19.095	11200	10	24.824	23.285					11346	37	25.235	4.714	11418	24	21.680	8.506
11129	8	22.108	19.580	11201	8	25.217	23.702					11347	26	1.402	5.356	11419	26	22.251	8.896
11130	33	24.214	19.948	11202	8	0.959	24.257					11348	17	1.916	5.874	11420	23	22.684	8.620
11131	8	0.020	20.651	11203	9	2.077	24.124					11349	28	2.405	5.734	11421	46	24.997	8.306
11132	9	1.972	20.410	11204	13	3.801	24.082					11350	36	4.875	5.496	11422	20	1.368	9.050
11133*	43	2.063	20.884	11205	9	5.028	24.444					11351	23	5.742	5.322	11423*	76	1.908	9.487
11134	13	3.422	20.886	11206	18	5.660	24.720					11352	15	6.326	5.869	11424	20	5.680	9.124
11135	33	4.581	20.244	11207	20	8.128	24.514					11353	23	8.268	5.835	11425	16	5.954	9.716
11136	16	5.582	20.658	11208	10	10.170	24.782					11354	24	8.378	5.492	11426	19	7.170	9.366



11430	18	9.965	9.713	11502	38	5.272	12.290	11574	14	10.090	16.054	11646	24	6.136	20.714	11718	16	9.154	24.708
11431*	38	11.106	9.932	11503	16	6.279	12.716	11575	17	10.223	16.454	11647	20	7.170	20.274	11719	12	10.514	24.394
11432	26	11.612	9.856	11504	19	11.585	12.120	11576	17	10.390	16.906	11648	16	8.022	20.174	11720	23	11.226	24.075
11433	23	11.812	9.630	11505	21	11.850	12.005	11577	17	12.665	16.756	11649	34	8.682	20.152	11721	17	11.626	24.566
11434	40	11.898	9.854	11506	25	12.011	12.093	11578	22	16.728	16.321	11650	36	12.286	20.384	11722	22	12.598	24.702
11435	19	11.949	9.331	11507	14	12.806	12.209	11579	34	17.946	16.776	11651*	88	17.340	20.224	11723	14	13.438	24.866
11436	19	17.402	9.075	11508	12	14.791	12.733	11580	19	18.786	16.225	11652*	62	18.815	20.976	11724	15	14.328	24.105
11437	20	20.932	9.954	11509	20	14.913	12.556	11581	16	20.161	16.478	11653	26	20.075	20.186	11725	18	15.052	24.226
11438	22	21.484	9.376	11510	18	17.308	12.085	11582	16	20.831	16.969	11654	20	20.511	20.226	11726	30	15.256	24.354
11439	21	24.860	9.557	11511	16	19.370	12.368	11583	24	21.914	16.780	11655	37	22.693	20.936	11727	34	17.705	24.684
11440	36	25.472	9.184	11512	14	21.146	12.070	11584	25	25.623	16.637	11656	48	23.335	20.156	11728	17	18.444	24.844
11441	32	0.105	10.124	11513*	59	21.764	12.248	11585	40	0.197	17.389	11657	52	23.690	20.529	11729	24	18.504	24.554
11442	56	0.384	10.000	11514	36	24.102	12.140	11586	14	1.851	17.784	11658	16	23.896	20.854	11730	22	19.863	24.941
11443	36	1.350	10.730	11515	37	0.647	13.046	11587*	84	4.200	17.596	11659	34	0.358	21.138	11731	24	20.723	24.516
11444	11	2.736	10.472	11516	23	1.151	13.750	11588	20	7.116	17.790	11660	16	1.328	21.480	11732	17	22.513	24.002
11445	34	4.440	10.356	11517*	60	1.904	13.216	11589	22	7.642	17.897	11661	20	2.064	21.932	11733	36	23.585	24.356
11446	20	4.608	10.972	11518	20	2.218	13.688	11590	30	8.145	17.359	11662	24	3.466	21.672	11734	70	24.144	24.822
11447	16	5.946	10.491	11519	17	4.778	13.456	11591	21	10.135	17.484	11663	16	3.578	21.325	11735	48	25.576	24.625
11448	15	7.267	10.154	11520	30	7.366	13.965	11592	24	10.178	17.244	11664	16	5.775	21.545	11736	57	4.124	25.786
11449	15	8.272	10.701	11521	15	8.806	13.978	11593	12	11.214	17.796	11665	40	6.424	21.993	11737	14	4.442	25.268
11450	18	10.675	10.904	11522*	46	10.504	13.798	11594*	56	11.364	17.346	11666	16	9.909	21.146	11738	36	4.495	25.572
11451	13	11.602	10.965	11523	17	11.536	13.660	11595	23	14.329	17.846	11667*	37	10.470	21.920	11739	32	4.612	25.372
11452	19	14.192	10.156	11524*	68	12.443	13.435	11596	15	17.058	17.854	11668	13	11.586	21.387	11740	40	5.321	25.380
11453	21	14.461	10.515	11525	22	13.922	13.534	11597	17	17.145	17.488	11669	16	11.845	21.044	11741	15	6.276	25.482
11454	16	14.778	10.936	11526	16	16.941	13.179	11598	14	17.850	17.866	11670	12	16.840	21.132	11742	50	6.843	25.684
11455	24	15.744	10.011	11527	12	18.046	13.489	11599	15	17.936	17.126	11671	18	20.074	21.655	11743	16	7.178	25.360
11456	18	16.354	10.160	11528	17	21.586	13.788	11600	19	17.993	17.980	11672	38	21.994	21.875	11744	40	8.650	25.875
11457	32	16.373	10.564	11529	16	23.026	13.134	11601	36	18.200	17.344	11673	25	25.232	21.816	11745	15	9.507	25.339
11458	13	17.618	10.227	11530	26	25.790	13.316	11602	36	22.617	17.154	11674	34	1.226	22.706	11746	36	10.434	25.486
11459	21	18.290	10.792	11531	12	0.176	14.246	11603	21	23.392	17.164	11675	14	3.338	22.492	11747	30	12.870	25.773
11460	24	19.015	10.081	11532	17	1.632	14.876	11604	28	23.414	17.966	11676	10	4.096	22.684	11748	20	13.551	25.344
11461	23	19.054	10.093	11533	20	1.806	14.438	11605	36	23.595	17.044	11677	36	7.051	22.983	11749	26	13.548	25.966
11462	30	22.077	10.150	11534	26	4.305	14.178	11606	24	23.965	17.391	11678	12	7.968	22.964	11750	12	14.926	25.953
11463	24	23.952	10.262	11535	16	5.902	14.375	11607	19	0.282	18.521	11679	24	8.829	22.876	11751	16	15.237	25.217
11464	16	0.277	11.988	11536	17	9.181	14.424	11608	21	0.411	18.976	11680	23	12.794	22.294	11752	22	16.386	25.996
11465	30	3.046	11.894	11537	20	9.756	14.406	11609	18	4.700	18.814	11681	15	14.096	22.806	11753	48	21.254	25.153
11466	30	5.350	11.150	11538	16	9.831	14.404	11610	32	5.332	18.686	11682	15	14.438	22.726	11754	56	24.656	25.647
11467	20	5.509	11.318	11539	13	10.730	14.382	11611	15	9.309	18.870	11683	16	14.587	22.305				
11468	16	6.819	11.205	11540	16	11.579	14.888	11612	13	9.648	18.575	11684	16	17.166	22.183				
11469	20	7.772	11.166	11541	13	12.914	14.699	11613	32	11.066	18.300	11685	18	17.298	22.029				
11470	22	8.540	11.563	11542	13	15.192	14.892	11614	24	12.356	18.386	11686	14	18.046	22.898				
11471	18	8.715	11.363	11543	15	16.046	14.786	11615	15	12.915	18.506	11687	22	20.125	22.782				
11472	21	8.846	11.452	11544	21	18.004	14.191	11616	14	13.724	18.665	11688	30	21.976	22.387				
11473	15	8.878	11.395	11545	15	18.256	14.498	11617	18	19.556	18.734	11689	46	22.638	22.025				
11474	10	9.462	11.477	11546	22	21.372	14.644	11618	34	21.964	18.228	11690	30	24.944	22.814				
11475	16	10.544	11.490	11547*	58	22.666	14.585	11619	16	22.072	18.456	11691	32	25.349	22.059				
11476	12	10.686	11.863	11548	40	22.778	14.476	11620	46	22.915	18.090	11692	40	1.144	23.147				
11477	13	12.420	11.254	11549	46	0.164	15.901	11621	44	23.644	18.613	11693	36	2.275	23.740				
11478	12	12.428	11.642	11550	18	4.044	15.952	11622	14	24.285	18.474	11694	22	2.628	23.476				
11479	16	14.062	11.441	11551	28	6.746	15.372	11623	52	25.600	18.508	11695	25	3.026	23.895				
11480	20	14.712	11.193	11552	14	6.780	15.302	11624	16	4.836	19.527	11696	16	6.060	23.316				
11481	13	14.952	11.766	11553	32	10.364	15.814	11625	15	6.308	19.046	11697	20	6.186	23.554				
11482	21	15.712	11.208	11554	16	12.323	15.974	11626	28	6.774	19.823	11698	22	8.675	23.806				
11483	14	15.736	11.400	11555	16	14.191	15.219	11627	17	7.034	19.114	11699	16	8.942	23.632				
11484	16	17.182	11.997	11556	16	14.342	15.990	11628	16	7.488	19.191	11700	18	11.014	23.772				
11485	18	17.705	11.115	11557	21	15.278	15.108	11629	37	8.709	19.436	11701	21	14.044	23.506				
11486	22	18.336	11.696	11558	21	16.806	15.008	11630	18	12.080	19.250	11702*	44	15.167	23.094				
11487	22	18.705	11.924	11559	12	18.048	15.296	11631	15	13.161	19.686	11703	34	16.824	23.976				
11488	17	19.200	11.066	11560	34	19.006	15.240	11632	16	14.212	19.278	11704	16	18.601	23.545				
11489*	56	19.255	11.093	11561	17	19.329	15.344	11633	18	14.534	19.794	11705	36	18.808	23.184				
11490	16	19.410	11.118	11562	23	19.440	15.044	11634	22	15.402	19.744	11706	18	21.464	23.424				
11491	18	19.526	11.026	11563	16	20.750	15.076	11635	25	15.582	19.758	11707	36	0.016	24.138				
11492	13	20.074	11.546	11564	15	21.742	15.143	11636	15	15.648	19.764	11708	42	0.794	24.656				
11493	36	20.634	11.858	11565	35	22.075	15.990	11637	19	17.471	19.580	11709*	78	1.466	24.944				
11494	18	21.117	11.080	11566	34	23.486	15.436	11638	14	18.005	19.784	11710	14	3.226	24.737				



11812	14	14.957	0.113	11884	14	2.872	4.742	11956	10	13.428	7.186	12028	10	6.606	10.271	12100	24	12.080	13.020
11813	23	18.816	0.488	11885	33	2.961	4.948	11957	23	13.656	7.638	12029*	34	6.802	10.126	12101	10	13.184	13.392
11814	13	21.397	0.476	11886	24	3.015	4.700	11958	23	13.748	7.956	12030	21	7.964	10.420	12102	17	15.108	13.515
11815	11	23.953	0.154	11887	13	6.676	4.340	11959	27	13.764	7.954	12031	21	13.414	10.360	12103	14	17.157	13.258
11816*	63	24.966	0.158	11888	21	6.736	4.396	11960	12	14.540	7.020	12032	14	18.901	10.886	12104	9	20.392	13.296
11817	9	0.368	1.156	11889	10	8.612	4.923	11961	19	15.240	7.808	12033	30	21.564	10.911	12105	12	21.278	13.624
11818	16	1.094	1.154	11890	9	10.095	4.142	11962	18	16.850	7.386	12034	22	22.070	10.740	12106	10	21.372	13.400
11819	21	1.349	1.484	11891	28	13.375	4.313	11963*	50	18.420	7.368	12035	14	22.086	10.622	12107	23	21.558	13.260
11820	28	1.792	1.486	11892	15	14.584	4.454	11964*	40	22.409	7.184	12036	14	23.108	10.499	12108	15	22.165	13.368
11821	10	3.915	1.515	11893	12	14.909	4.362	11965	17	23.650	7.312	12037	24	23.845	10.436	12109	27	22.220	13.663
11822	21	4.620	1.405	11894*	50	15.882	4.146	11966	20	0.093	8.927	12038	10	25.826	10.160	12110	11	22.692	13.026
11823*	75	4.902	1.590	11895	30	17.076	4.756	11967	16	0.522	8.644	12039	10	0.194	11.043	12111	12	22.694	13.036
11824	19	5.471	1.597	11896	12	17.865	4.382	11968	32	2.828	8.294	12040	10	0.241	11.105	12112	25	23.353	13.636
11825	10	8.036	1.274	11897	30	18.386	4.650	11969	8	3.929	8.880	12041	9	0.614	11.560	12113	12	24.104	13.216
11826	35	8.798	1.016	11898	22	19.314	4.734	11970	31	3.982	8.836	12042	25	2.750	11.703	12114	32	25.470	13.800
11827	13	9.306	1.694	11899	25	19.928	4.976	11971	16	6.400	8.550	12043	16	3.988	11.134	12115	17	25.831	13.040
11828	10	9.954	1.076	11900	10	20.900	4.124	11972	14	6.592	8.271	12044	35	5.211	11.033	12116*	45	0.588	14.609
11829	15	10.420	1.946	11901	10	21.144	4.770	11973	21	6.836	8.140	12045	10	6.190	11.595	12117	10	0.634	14.945
11830	14	11.756	1.645	11902	13	23.268	4.259	11974	13	7.016	8.859	12046	13	6.653	11.694	12118	41	0.700	14.500
11831	11	12.867	1.243	11903	23	24.104	4.624	11975	28	7.916	8.688	12047	23	7.261	11.999	12119	18	3.090	14.046
11832	11	13.318	1.782	11904	23	0.500	5.476	11976	21	9.202	8.126	12048	17	8.042	11.850	12120	24	4.290	14.050
11833	29	13.345	1.720	11905	10	0.980	5.200	11977	23	9.672	8.570	12049	21	9.100	11.440	12121	8	4.821	14.616
11834	11	13.780	1.935	11906	31	3.641	5.836	11978	13	9.701	8.578	12050	9	9.940	11.276	12122	12	6.641	14.599
11835	27	13.893	1.676	11907	14	4.099	5.203	11979	12	10.314	8.394	12051	30	10.856	11.149	12123	26	6.793	14.232
11836	22	14.358	1.068	11908	15	5.808	5.856	11980	34	10.394	8.530	12052	15	11.892	11.730	12124	22	8.126	14.884
11837	20	15.240	1.776	11909	22	10.159	5.408	11981	34	12.178	8.302	12053	18	12.700	11.694	12125	18	8.310	14.438
11838	23	15.850	1.664	11910	29	14.118	5.570	11982	11	12.592	8.570	12054	12	12.766	11.896	12126	27	9.034	14.577
11839	10	16.463	1.416	11911	14	14.200	5.453	11983	18	13.106	8.310	12055	9	13.597	11.432	12127	30	10.122	14.378
11840*	49	16.544	1.480	11912	29	15.160	5.028	11984	13	13.378	8.717	12056	12	14.830	11.810	12128	12	12.750	14.860
11841	9	16.677	1.856	11913	10	17.626	5.792	11985	13	13.641	8.850	12057	16	15.279	11.102	12129	19	12.872	14.167
11842	27	16.849	1.753	11914	35	18.535	5.800	11986	36	13.968	8.824	12058	10	15.611	11.188	12130	10	12.898	14.292
11843	12	19.242	1.625	11915*	50	19.025	5.410	11987	20	14.284	8.156	12059	14	15.618	11.318	12131	30	13.206	14.190
11844	28	21.402	1.209	11916	10	23.500	5.414	11988	21	14.791	8.352	12060	25	15.626	11.334	12132	10	14.502	14.184
11845	13	21.588	1.472	11917	34	23.758	5.504	11989	10	15.718	8.688	12061	25	16.914	11.544	12133	10	15.277	14.394
11846	23	23.947	1.846	11918	30	24.618	5.928	11990	14	16.676	8.800	12062	23	17.296	11.891	12134	27	18.621	14.817
11847*	41	25.138	1.590	11919	12	25.840	5.250	11991	10	18.310	8.633	12063	29	17.470	11.276	12135	25	19.236	14.726
11848	17	1.300	2.782	11920	31	25.986	5.145	11992	24	19.037	8.034	12064	14	17.935	11.040	12136	15	20.964	14.440
11849	10	3.650	2.735	11921	11	1.866	6.317	11993	16	19.322	8.193	12065	34	18.130	11.816	12137	14	21.759	14.532
11850	15	3.867	2.775	11922	16	4.450	6.848	11994	19	20.036	8.134	12066	28	22.690	11.806	12138	10	22.675	14.520
11851	12	3.954	2.418	11923	22	4.968	6.732	11995	24	20.916	8.902	12067	25	25.326	11.600	12139	30	1.426	15.450
11852	21	4.679	2.624	11924	14	8.153	6.662	11996	33	21.643	8.443	12068	27	1.990	12.143	12140	12	2.390	15.814
11853	10	10.254	2.620	11925	10	10.476	6.777	11997	30	22.324	8.938	12069	10	3.526	12.306	12141	13	2.490	15.734
11854	21	12.826	2.127	11926	19	10.580	6.326	11998	29	22.934	8.312	12070	15	4.001	12.148	12142	19	2.527	15.101
11855	10	12.922	2.216	11927	27	10.894	6.406	11999	40	23.410	8.666	12071	33	4.112	12.612	12143*	43	3.846	15.238
11856	22	14.758	2.535	11928*	43	11.684	6.666	12000	36	25.678	8.546	12072	12	5.080	12.668	12144	10	5.074	15.234
11857	38	14.981	2.278	11929	17	12.274	6.830	12001	23	25.695	8.862	12073	19	6.736	12.095	12145	26	5.275	15.076
11858	16	18.160	2.230	11930	10	14.378	6.904	12002	13	2.712	9.551	12074	12	7.584	12.286	12146	12	5.577	15.824
11859*	38	19.316	2.565	11931*	40	16.843	6.827	12003	9	3.277	9.232	12075	11	10.000	12.150	12147	22	6.298	15.710
11860	22	19.514	2.606	11932	12	17.000	6.480	12004	25	3.314	9.166	12076	21	11.804	12.140	12148	9	6.644	15.012
11861	12	20.399	2.006	11933	12	17.048	6.096	12005	34	4.300	9.339	12077	25	14.258	12.364	12149	23	7.780	15.015
11862	28	20.426	2.372	11934	25	17.165	6.646	12006	40	5.320	9.599	12078	10	15.313	12.848	12150	23	7.794	15.656
11863	13	21.664	2.463	11935	14	19.066	6.776	12007	11	6.694	9.028	12079	30	15.600	12.816	12151	15	11.094	15.854
11864	27	21.744	2.162	11936	23	19.135	6.504	12008	29	8.396	9.220	12080	20	16.882	12.565	12152	33	14.298	15.262
11865	23	22.867	2.919	11937	20	19.298	6.460	12009	9	8.840	9.797	12081	23	18.946	12.113	12153	10	14.800	15.012
11866	8	0.400	3.181	11938	30	19.310	6.496	12010	15	9.842	9.820	12082	10	19.830	12.832	12154	12	15.032	15.015
11867	33	5.445	3.945	11939	10	20.115	6.390	12011	35	10.523	9.300	12083	38	21.125	12.434	12155	30	15.874	15.359
11868	25	5.750	3.340	11940	10	22.030	6.910	12012	11	11.604	9.962	12084	36	22.006	12.884	12156	18	16.155	15.075
11869	24	8.830	3.329	11941	14	23.030	6.452	12013	10	13.076	9.040	12085	13	23.564	12.705	12157	10	16.952	15.562
11870	10	10.056	3.459	11942	10	0.574	7.312	12014	12	15.014	9.394	12086*	48	23.898	12.422	12158	10	17.150	15.976
11871	12	10.106	3.429	11943	13	1.534	7.564	12015	21	15.708	9.514	12087	13	25.342	12.330	12159	17	17.696	15.432
11872	14	10.326	3.543	11944	9	2.428	7.326	12016	13	16.706	9.480	12088	14	25.831	12.658	12160	11	18.482	15.164
11873	19	11.496	3.970	11945	39	3.266	7.920	12017	26	16.760	9.838	12089	10	0.934	13.152	12161	10	18.744	15.050
11874	25	12.135	3.986	11946	30	4.592	7.044	12018	10	20.050	9.678	12090	10	2.714					



12172	8	19.152	16.160	12244	21	22.804	19.418	12316	41	6.686	23.836	<div>R.A. 6<sup>h</sup> 4<sup>m</sup></div> <div>Plate 880; 1916 Nov. 30.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>−.02556 +.00411 +.2166</div> <div>D E F</div> <div>−.00416 −.02569 −.1102</div> <div>Mag.=16.6−1.09√<i>d</i></div>	12456	8	5.469	2.022
12173	25	20.520	16.754	12245	21	22.850	19.086	12317	14	8.125	23.680		12457	18	6.802	2.687
12174	29	23.238	16.834	12246	22	23.960	19.750	12318	21	8.685	23.382		12458	8	7.554	2.218
12175	11	24.950	16.979	12247	40	24.396	19.916	12319	19	9.546	23.852		12459	11	10.026	2.125
12176	14	25.900	16.330	12248	25	0.712	20.959	12320	11	10.526	23.250		12460	18	10.100	2.668
12177	22	25.964	16.350	12249	39	1.342	20.167	12321	30	10.742	23.941		12461	11	13.606	2.506
12178	30	0.580	17.176	12250	39	1.700	20.538	12322	23	12.030	23.116		12462	12	13.628	2.049
12179	10	1.356	17.178	12251	12	1.916	20.862	12323	20	15.096	23.715		12463	22	14.870	2.964
12180	24	1.388	17.978	12252	20	7.965	20.489	12324	24	15.640	23.412		12464	8	15.408	2.059
12181	28	1.556	17.054	12253	11	9.744	20.526	12325	17	17.214	23.584		12465*	98	15.515	2.075
12182	14	1.932	17.400	12254	32	11.101	20.240	12326	10	18.466	23.712	12466	11	15.579	2.716	
12183	16	3.980	17.744	12255	16	13.274	20.094	12327	29	21.014	23.122	12467	17	16.665	2.778	
12184*	47	5.700	17.156	12256	11	14.130	20.962	12328	12	21.079	23.455	12468	23	17.116	2.408	
12185	37	6.842	17.264	12257	29	15.380	20.894	12329	22	22.336	23.414	12469	10	18.186	2.017	
12186	22	7.100	17.684	12258	10	15.458	20.971	12330	10	25.629	23.052	12470	28	18.753	2.495	
12187	12	9.778	17.344	12259	17	17.087	20.050	12331	23	1.658	24.364	12471	16	20.833	2.290	
12188	12	12.060	17.280	12260*	55	18.036	20.532	12332	46	2.215	24.819	12472	79	22.148	2.711	
12189	33	13.146	17.248	12261	10	18.400	20.491	12333	10	2.864	24.286	12473	18	22.420	2.807	
12190	22	20.594	17.930	12262	18	18.965	20.743	12334	15	3.104	24.432	12474	11	23.245	2.275	
12191	16	21.178	17.468	12263	26	19.604	20.949	12335	31	3.652	24.600	12475	19	0.733	3.078	
12192	10	21.594	17.399	12264	30	19.724	20.789	12336	24	4.596	24.012	12476	9	1.824	3.916	
12193	29	21.816	17.759	12265*	37	19.745	20.846	12337	18	7.456	24.820	12477	8	2.759	3.480	
12194	19	21.900	17.460	12266	17	20.966	20.559	12338	22	7.724	24.049	12478	11	5.846	3.870	
12195	21	23.109	17.376	12267	19	21.880	20.890	12339	20	8.350	24.052	12479	17	7.038	3.666	
12196	31	23.711	17.500	12268	11	22.915	20.196	12340	26	10.662	24.151	12480	10	10.408	3.479	
12197	10	0.056	18.486	12269	13	23.112	20.950	12341*	33	12.454	24.340	12481	10	10.684	3.634	
12198	10	0.565	18.912	12270	31	24.193	20.430	12342	17	13.295	24.648	12482	11	10.753	3.754	
12199	34	0.888	18.112	12271*	41	24.460	20.904	12343	12	13.785	24.952	12483	10	12.932	3.566	
12200	9	1.264	18.755	12272	28	0.026	21.906	12344	26	15.566	24.100	12484	13	13.254	3.656	
12201	36	1.628	18.620	12273	10	3.175	21.697	12345	16	16.532	24.456	12485	10	14.092	3.327	
12202	10	2.272	18.471	12274	15	3.266	21.804	12346*	38	18.242	24.388	12486	20	14.392	3.910	
12203	10	2.358	18.587	12275	29	5.328	21.650	12347	9	19.196	24.343	12487	20	16.676	3.745	
12204	11	2.726	18.902	12276	33	7.175	21.224	12348	8	19.972	24.748	12488	13	17.350	3.301	
12205	10	2.914	18.585	12277	9	7.869	21.570	12349	21	21.220	24.351	12489	12	17.970	3.574	
12206	29	3.582	18.490	12278	14	10.306	21.469	12350	30	22.370	24.857	12490	30	18.310	3.600	
12207	24	5.857	18.965	12279	22	12.330	21.896	12351	13	23.140	24.544	12491	11	18.477	3.647	
12208	19	8.052	18.390	12280	29	12.404	21.956	12352	8	23.535	24.272	12492	10	18.974	3.509	
12209	10	12.039	18.256	12281	10	12.732	21.894	12353	11	23.774	24.850	12493	21	21.058	3.147	
12210	21	14.430	18.202	12282	27	12.676	21.394	12354	10	24.844	24.652	12494	15	22.030	3.451	
12211	24	14.724	18.500	12283	10	15.684	21.200	12355	35	2.750	25.638	12495	12	22.674	3.736	
12212	9	15.842	18.602	12284	20	17.872	21.597	12356	10	3.300	25.128	12496	10	22.744	3.541	
12213	20	16.767	18.254	12285	11	19.225	21.683	12357	29	5.483	25.958	12497	9	25.044	3.329	
12214	23	18.772	18.530	12286	10	20.906	21.966	12358	11	7.660	25.909	12498	13	1.150	4.412	
12215	34	20.556	18.804	12287	17	21.750	21.432	12359	10	7.970	25.816	12499	17	1.986	4.768	
12216	24	21.016	18.963	12288	9	23.290	21.513	12360	17	8.684	25.010	12500*	30	5.387	4.837	
12217	33	21.418	18.392	12289	25	24.110	21.388	12361	15	9.412	25.600	12501	11	5.722	4.054	
12218	15	22.347	18.858	12290	11	25.629	21.410	12362	12	10.453	25.862	12502	14	8.588	4.180	
12219	16	23.672	18.865	12291	12	25.978	21.301	12363	22	14.838	25.156	12503	26	9.527	4.994	
12220	10	24.284	18.604	12292	16	0.020	22.421	12364	18	17.256	25.658	12504	11	10.236	4.530	
12221	29	25.162	18.787	12293	32	0.674	22.043	12365	35	20.972	25.186	12505	9	10.327	4.811	
12222*	56	25.245	18.108	12294	17	2.996	22.800	12366	16	21.150	25.926	12506	19	13.850	4.770	
12223	23	2.925	19.323	12295	23	3.388	22.044	12367	22	21.454	25.061	12507	8	14.060	4.650	
12224	12	4.678	19.106	12296	12	4.313	22.322	12368	8	24.367	25.853	12508	18	14.664	4.826	
12225	22	5.148	19.810	12297	31	4.332	22.884	12369	16	24.998	25.736	12509	12	15.847	4.828	
12226	10	5.680	19.546	12298	29	5.662	22.156	12370	28	25.226	25.375	12510	10	16.570	4.581	
12227	10	6.030	19.160	12299	10	6.599	22.520					12511	12	17.428	4.733	
12228	35	6.080	19.654	12300	24	6.938	22.534					12512	10	17.919	4.904	
12229	24	7.414	19.162	12301	11	7.102	22.268					12513	12	19.630	4.090	
12230	36	8.750	19.820	12302	24	9.386	22.732					12514	28	20.552	4.971	
12231	23	10.053	19.492	12303	37	9.863	22.212					12515	12	21.341	4.807	
12232	23	13.266	19.050	12304	14	10.957	22.051									



12528	19	7.646	5.743	12600	8	25.678	7.920	12672	10	25.352	9.308	12744	8	8.678	12.145	12816	10	17.230	14.291
12529	13	8.516	5.582	12601	27	0.854	8.466	12673	8	25.796	9.806	12745	10	9.654	12.632	12817	11	18.884	14.690
12530	12	9.092	5.370	12602	43	1.330	8.818	12674	12	0.016	10.906	12746	12	9.922	12.330	12818	8	19.127	14.588
12531	9	9.778	5.806	12603	14	2.999	8.700	12675	10	0.032	10.788	12747	17	11.492	12.127	12819	8	19.216	14.777
12532	28	10.382	5.800	12604	10	3.120	8.958	12676	13	1.056	10.652	12748	12	13.020	12.880	12820	14	19.304	14.766
12533	15	10.576	5.158	12605	40	3.600	8.672	12677	19	1.788	10.582	12749	24	14.027	12.568	12821	11	19.844	14.754
12534	26	10.606	5.765	12606	12	3.610	8.682	12678	8	2.324	10.128	12750	25	15.476	12.566	12822	10	20.084	14.458
12535	35	11.334	5.345	12607	20	3.621	8.988	12679	10	2.946	10.043	12751*	47	16.288	12.270	12823	10	22.944	14.167
12536	28	12.798	5.945	12608	10	4.525	8.189	12680	10	3.618	10.938	12752	13	17.590	12.330	12824	24	23.856	14.366
12537	15	14.012	5.663	12609	9	5.198	8.922	12681	10	3.770	10.287	12753	16	17.810	12.282	12825	10	23.906	14.251
12538	19	14.256	5.248	12610	27	5.315	8.198	12682	10	5.693	10.230	12754	10	19.165	12.584	12826	17	24.223	14.372
12539	10	14.678	5.344	12611	11	5.923	8.267	12683	12	6.906	10.050	12755	12	19.346	12.122	12827	9	24.276	14.062
12540	9	14.702	5.864	12612	22	6.439	8.152	12684	10	9.116	10.580	12756	8	20.760	12.864	12828	10	24.724	14.912
12541	9	14.872	5.894	12613	35	6.638	8.472	12685	12	9.915	10.744	12757	8	21.048	12.838	12829	28	24.768	14.160
12542	10	17.676	5.778	12614	13	7.717	8.177	12686	9	9.926	10.356	12758	18	22.036	12.431	12830*	43	2.326	15.782
12543	12	18.872	5.269	12615	10	7.806	8.550	12687	13	10.622	10.330	12759	10	22.036	12.930	12831	37	3.181	15.530
12544	9	19.814	5.857	12616	10	8.150	8.126	12688	13	10.814	10.252	12760	18	22.502	12.898	12832	10	3.348	15.740
12545	11	20.683	5.998	12617	10	10.962	8.792	12689	12	11.072	10.616	12761	11	24.079	12.023	12833	12	4.334	15.042
12546	29	21.438	5.057	12618	10	13.320	8.022	12690	8	11.587	10.333	12762	44	24.153	12.308	12834	17	6.028	15.934
12547	8	21.588	5.250	12619	11	13.540	8.600	12691	9	13.342	10.266	12763	10	24.257	12.570	12835	9	6.344	15.915
12548	8	23.546	5.182	12620	15	14.238	8.150	12692	17	15.034	10.900	12764	8	25.046	12.320	12836	32	6.557	15.261
12549	13	24.633	5.694	12621	30	15.546	8.243	12693	12	16.005	10.737	12765	8	25.442	12.682	12837	18	6.876	15.600
12550	21	24.806	5.774	12622	23	15.828	8.173	12694	9	16.212	10.211	12766	9	25.715	12.193	12838	8	7.282	15.302
12551	11	0.932	6.607	12623	19	16.848	8.684	12695	10	16.562	10.570	12767	12	0.142	13.530	12839	8	9.832	15.348
12552	11	1.369	6.076	12624	9	17.216	8.980	12696	22	16.942	10.334	12768	23	0.197	13.826	12840	21	10.650	15.756
12553	34	2.513	6.064	12625	9	17.924	8.808	12697	14	17.506	10.962	12769	12	0.666	13.188	12841	9	11.345	15.732
12554	12	3.518	6.656	12626	9	18.718	8.764	12698	13	18.860	10.626	12770	24	1.332	13.788	12842	10	11.533	15.526
12555	22	5.726	6.490	12627	26	19.114	8.860	12699	22	19.038	10.590	12771	12	2.078	13.360	12843	12	11.657	15.282
12556	12	6.010	6.227	12628	9	19.170	8.814	12700	20	19.689	10.740	12772	10	3.184	13.566	12844	10	11.850	15.994
12557	8	6.324	6.681	12629	11	19.303	8.126	12701	17	21.001	10.930	12773	27	3.452	13.928	12845	13	12.720	15.408
12558	9	6.931	6.030	12630	33	19.592	8.598	12702	16	21.330	10.672	12774	14	3.806	13.166	12846	10	12.860	15.378
12559	11	9.045	6.862	12631	33	19.678	8.966	12703	12	21.513	10.589	12775	12	5.608	13.802	12847	9	14.524	15.758
12560	11	10.102	6.607	12632	10	19.847	8.604	12704	8	21.781	10.396	12776	22	5.746	13.672	12848	12	14.730	15.918
12561	38	10.632	6.930	12633	11	20.587	8.718	12705	10	21.960	10.752	12777	9	6.300	13.602	12849	9	15.052	15.824
12562	9	11.189	6.954	12634	37	21.990	8.750	12706	18	23.142	10.714	12778*	43	9.306	13.442	12850	15	15.726	15.674
12563	9	11.448	6.394	12635	20	22.502	8.300	12707	19	0.650	11.966	12779	8	9.916	13.172	12851	11	17.924	15.931
12564	8	12.406	6.494	12636	17	24.698	8.814	12708	20	3.286	11.732	12780	15	10.826	13.584	12852	16	18.242	15.540
12565	20	12.706	6.502	12637	10	24.794	8.743	12709	19	3.999	11.832	12781	10	11.160	13.366	12853	15	21.607	15.108
12566	15	13.686	6.564	12638	22	0.250	9.100	12710	11	5.198	11.495	12782	15	11.720	13.527	12854	12	21.734	15.491
12567	16	14.268	6.930	12639	26	0.412	9.465	12711	19	5.738	11.244	12783*	43	13.378	13.422	12855	8	23.368	15.499
12568*	45	15.581	6.416	12640	10	0.514	9.431	12712	10	5.813	11.463	12784	8	14.824	13.732	12856	34	24.725	15.194
12569	19	16.218	6.752	12641	14	0.987	9.726	12713	15	6.166	11.467	12785	17	16.685	13.604	12857	25	1.254	16.987
12570	31	19.033	6.800	12642	13	2.460	9.192	12714*	44	6.597	11.195	12786	15	17.923	13.017	12858	10	3.713	16.139
12571*	40	19.500	6.630	12643	10	2.544	9.572	12715	10	8.713	11.429	12787	20	18.857	13.468	12859	16	3.912	16.455
12572	8	20.652	6.376	12644	8	3.876	9.777	12716	8	8.740	11.344	12788	8	19.379	13.194	12860	17	3.976	16.474
12573	22	20.686	6.980	12645	10	4.170	9.628	12717	20	9.778	11.509	12789	35	19.406	13.922	12861	8	4.363	16.909
12574	11	24.822	6.260	12646	27	4.700	9.751	12718	14	10.748	11.687	12790	10	20.583	13.925	12862	17	5.631	16.683
12575	10	25.252	6.248	12647	8	4.969	9.148	12719	19	10.914	11.088	12791	12	21.158	13.093	12863	12	6.348	16.692
12576	45	0.314	7.346	12648	20	5.156	9.524	12720	10	12.356	11.824	12792	10	21.286	13.910	12864	11	7.952	16.332
12577	14	1.562	7.459	12649	10	5.176	9.098	12721	8	12.520	11.778	12793	10	22.026	13.094	12865	10	9.056	16.140
12578	16	5.220	7.074	12650	12	5.340	9.978	12722	26	13.300	11.160	12794	19	22.194	13.878	12866	19	9.775	16.421
12579	25	5.335	7.630	12651	11	7.218	9.698	12723	11	13.551	11.284	12795	11	22.903	13.503	12867	25	9.893	16.184
12580	14	5.444	7.678	12652	11	7.395	9.602	12724	11	14.888	11.534	12796	25	22.950	13.044	12868	9	10.060	16.651
12581	9	5.886	7.248	12653	8	8.604	9.186	12725	12	16.189	11.018	12797	38	23.094	13.894	12869	8	15.461	16.419
12582	15	6.644	7.410	12654	9	9.406	9.257	12726	12	16.260	11.054	12798	10	25.086	13.557	12870	9	15.586	16.722
12583	10	7.456	7.742	12655	16	10.304	9.574	12727	23	16.736	11.379	12799	12	25.147	13.632	12871	12	17.103	16.246
12584	9	8.051	7.749	12656	21	11.058	9.034	12728	34	17.900	11.248	12800	8	0.664	14.682	12872	10	17.784	16.022
12585	12	9.657	7.062	12657	9	11.842	9.307	12729	20	17.988	11.272	12801	8	3.172	14.732	12873	11	18.642	16.420
12586	12	9.674	7.634	12658	10	12.709	9.339	12730	9	18.666	11.408	12802	13	5.126	14.884	12874	8	19.547	16.256
12587	34	12.843	7.358	12659	37	14.828	9.380	12731	10	18.750	11.259	12803	11	6.090	14.970	12875	9	20.177	16.944
12588	24	14.234	7.120	12660	10	15.454	9.024	12732	12	18.769	11.950	12804	10	6.322	14.497	12876	16	20.788	16.692
12589	20	15.344	7.022	12661	20	15.595	9.772	12733	15	19.362	11.275	12805	9	7.415	14.588	12877	24	22.670	16.357
12590	13	15.642	7.260	12662	8	16.424	9.787	12734	13	20.416	11.073	12806	21	8.076	14				



12888	10	7.214	17.690	12960	15	17.958	19.750	13032	19	19.260	21.547	13104	11	2.952	24.789	13158	56	11.960	0.382
12889	8	7.712	17.026	12961	29	18.129	19.300	13033	12	19.800	21.841	13105	9	4.298	24.205	13159	39	17.629	0.892
12890	8	8.376	17.120	12962	17	19.128	19.860	13034	9	20.306	21.978	13106	8	6.718	24.514	13160	11	21.433	0.496
12891	15	10.036	17.147	12963	24	20.587	19.163	13035	10	21.317	21.526	13107	13	8.081	24.484	13161	12	22.296	0.612
12892	11	10.432	17.379	12964	11	20.820	19.474	13036	34	21.636	21.294	13108	11	10.462	24.446	13162	10	23.399	0.614
12893	34	11.166	17.472	12965	12	21.164	19.564	13037	27	21.944	21.688	13109	9	10.720	24.555	13163	48	24.336	0.641
12894	16	12.084	17.532	12966	11	21.298	19.008	13038	8	22.204	21.606	13110	24	13.403	24.426	13164	72	25.130	0.404
12895*	71	12.445	17.400	12967	12	21.855	19.442	13039	13	24.040	21.388	13111	10	14.202	24.718	13165	100	25.701	0.006
12896	14	13.572	17.911	12968	43	25.624	19.043	13040	8	24.016	21.016	13112	14	14.245	24.039	13166	11	2.780	1.272
12897	9	13.841	17.672	12969	13	0.334	20.047	13041	24	24.185	21.540	13113	33	16.197	24.955	13167*	82	8.020	1.692
12898	10	16.630	17.973	12970	9	0.968	20.350	13042	10	25.782	21.162	13114	11	19.352	24.566	13168	13	9.574	1.506
12899	34	19.625	17.067	12971	40	2.244	20.575	13043	9	4.326	22.035	13115	16	19.491	24.759	13169	15	12.822	1.745
12900	10	20.998	17.923	12972	41	2.442	20.057	13044	8	4.628	22.900	13116	8	20.383	24.147	13170	11	13.545	1.616
12901	10	22.676	17.307	12973	10	4.280	20.942	13045	14	5.106	22.563	13117	14	20.646	24.930	13171	23	13.916	1.694
12902	10	2.316	18.748	12974	12	4.344	20.750	13046	9	5.327	22.284	13118	9	22.648	24.474	13172	26	14.268	1.499
12903	25	3.198	18.920	12975	18	4.958	20.194	13047	24	5.444	22.304	13119	12	22.958	24.846	13173	13	14.854	1.160
12904*	69	3.266	18.238	12976	13	5.710	20.530	13048	12	6.442	22.485	13120	27	23.306	24.962	13174	23	18.398	1.364
12905	14	4.769	18.293	12977	9	6.249	20.643	13049	10	7.080	22.860	13121	9	24.221	24.657	13175	17	18.655	1.462
12906	13	4.891	18.850	12978	8	7.930	20.550	13050	12	8.308	22.062	13122	8	25.793	24.558	13176	10	19.784	1.470
12907	12	4.966	18.142	12979	14	8.500	20.560	13051	11	8.956	22.224	13123	31	0.474	25.021	13177	15	22.286	1.630
12908	10	7.442	18.893	12980	10	9.181	20.682	13052	10	10.328	22.425	13124	10	2.486	25.992	13178	10	23.114	1.604
12909	28	8.359	18.734	12981	10	9.193	20.176	13053	22	11.805	22.797	13125	21	3.112	25.870	13179	28	24.268	1.928
12910	12	9.570	18.993	12982	22	9.626	20.221	13054	14	12.825	22.229	13126	9	3.253	25.572	13180	11	0.900	2.616
12911	16	10.106	18.332	12983	37	9.727	20.952	13055	10	14.497	22.682	13127	31	3.338	25.508	13181	17	6.508	2.331
12912	14	10.758	18.600	12984	16	10.738	20.260	13056	15	14.629	22.558	13128	10	3.678	25.836	13182	16	9.306	2.081
12913	10	10.763	18.332	12985	18	13.061	20.414	13057	10	14.747	22.813	13129	41	5.868	25.150	13183	17	10.016	2.793
12914	22	11.206	18.370	12986	10	13.306	20.230	13058	9	14.747	22.853	13130	10	8.144	25.634	13184	49	12.666	2.719
12915	10	11.954	18.807	12987	8	13.783	20.025	13059	10	16.382	22.892	13131	10	10.948	25.158	13185	21	13.287	2.649
12916	10	14.853	18.508	12988	21	13.824	20.110	13060	24	17.795	22.804	13132	25	11.718	25.399	13186	19	13.333	2.510
12917	8	15.934	18.414	12989	15	14.482	20.087	13061	8	18.156	22.613	13133	27	12.536	25.652	13187	19	17.106	2.556
12918	12	16.346	18.891	12990	8	15.827	20.946	13062	30	18.586	22.458	13134	23	12.772	25.504	13188*	68	25.117	2.668
12919	11	16.744	18.658	12991	13	16.196	20.278	13063	22	19.188	22.654	13135	33	13.468	25.643	13189	46	25.538	2.848
12920	20	16.770	18.770	12992	9	16.646	20.311	13064	14	21.827	22.628	13136	18	15.006	25.454	13190	22	0.082	3.160
12921	10	16.904	18.292	12993	14	17.810	20.438	13065	9	22.197	22.709	13137	9	16.006	25.352	13191	34	5.562	3.550
12922	10	17.684	18.780	12994	11	18.655	20.212	13066	9	24.487	22.366	13138	23	16.576	25.921	13192	14	6.402	3.351
12923	10	17.770	18.940	12995	12	20.916	20.352	13067	13	0.426	23.575	13139	8	20.098	25.035	13193	18	6.886	3.931
12924	9	19.682	18.449	12996	9	21.314	20.178	13068	9	1.436	23.262	13140	10	21.676	25.231	13194	11	7.259	3.929
12925	11	20.338	18.830	12997	13	21.832	20.073	13069	10	1.526	23.840	13141	28	22.158	25.550	13195	57	8.157	3.596
12926	10	20.430	18.560	12998	12	21.964	20.550	13070	19	1.600	23.146	13142	8	25.295	25.694	13196	35	9.032	3.149
12927	9	21.070	18.776	12999	22	22.052	20.774	13071	10	3.718	23.181	13143	30	25.361	25.622	13197	9	9.060	3.100
12928	13	21.156	18.430	13000	8	22.561	20.258	13072	9	4.541	23.133	13144	31	25.548	25.899	13198	13	10.625	3.019
12929	10	22.135	18.188	13001	21	24.895	20.736	13073	41	6.644	23.454					13199	19	11.234	3.074
12930	20	22.190	18.627	13002	10	1.176	21.105	13074	17	7.062	23.578					13200	13	12.056	3.470
12931	18	22.293	18.840	13003	11	1.360	21.664	13075	12	7.077	23.099					13201	26	13.862	3.632
12932	11	22.920	18.960	13004	8	1.486	21.634	13076	11	7.538	23.948					13202	22	15.106	3.871
12933	14	22.948	18.148	13005	25	2.176	21.532	13077	18	8.028	23.788					13203	37	16.166	3.116
12934	9	23.570	18.222	13006*	48	2.518	21.044	13078	11	8.507	23.158					13204	21	16.830	3.071
12935	24	24.794	18.562	13007	10	3.694	21.536	13079*	60	9.033	23.390					13205	14	20.137	3.492
12936	8	25.218	18.670	13008	15	4.046	21.426	13080	13	9.284	23.240					13206	12	0.345	4.085
12937	16	0.385	19.018	13009	8	4.652	21.270	13081	14	9.398	23.540					13207	10	1.494	4.803
12938	14	0.422	19.512	13010	9	6.237	21.766	13082	19	9.412	23.674					13208*	70	2.560	4.430
12939	14	0.848	19.576	13011	10	6.656	21.445	13083	11	9.856	23.600					13209	11	4.752	4.718
12940	15	0.890	19.244	13012	11	6.805	21.038	13084	10	11.312	23.051					13210	11	5.504	4.602
12941	12	1.712	19.012	13013	9	7.868	21.040	13085	8	13.740	23.120					13211	10	9.444	4.553
12942	9	3.402	19.432	13014	27	8.603	21.882	13086	26	14.934	23.613					13212	37	9.924	4.183
12943	8	5.500	19.185	13015	9	8.672	21.410	13087	19	15.164	23.251					13213	51	10.138	4.930
12944	8	6.525	19.276	13016	16	9.298	21.238	13088	30	15.177	23.370					13214	10	12.274	4.108
12945	12	7.644	19.717	13017	10	10.564	21.932	13089	10	15.212	23.693					13215	34	12.837	4.550
12946	10	8.053	19.324	13018	35	11.276	21.626	13090	9	15.734	23.320					13216	27	13.133	4.876
12947	27	8.950	19.490	13019*	56	12.361	21.398	13091	13	17.118	23.538					13217	10	16.371	4.573
12948	10	9.417	19.366	13020	10	12.938	21.516	13092	14	17.228	23.999					13218	24	18.287	4.474
12949	13	9.807	19.398	13021	15	13.440	21.452	13093	11	18.644	23.476					13219	14	18.304	4.776
12950	8	10.220	19.918	13022	9	13.588	21.532	13094	14	19.500	23.674					13220	18	22.682	4.174
12951	29	10.908	19.202	13023	32	13.826	21.260	13095	26	19.617	23.288					13221	34	25.156	4.770
12952	12	11.210	19.106	13024	18	14.333	21.187	13096	8	20.138	23.833					13222	10	25.250	4.585
12953	20</																		



13230*	48	14.056	5.822	13302	25	12.877	8.806	13374	26	8.302	11.876	13446	15	19.370	14.607	13518	20	18.380	17.126
13231	10	17.580	5.675	13303	14	13.382	8.960	13375	23	9.024	11.628	13447	10	20.497	14.034	13519*	71	21.452	17.952
13232	12	17.739	5.780	13304	13	13.920	8.550	13376	13	11.170	11.460	13448	15	22.161	14.508	13520	29	21.888	17.432
13233*	75	18.169	5.430	13305	10	14.511	8.837	13377	11	12.694	11.440	13449	54	22.457	14.055	13521	26	22.182	17.263
13234	25	18.776	5.390	13306	22	15.607	8.784	13378	11	12.938	11.708	13450	16	23.644	14.876	13522	33	23.172	17.992
13235	26	18.829	5.733	13307	41	15.904	8.406	13379	22	13.068	11.300	13451	26	24.682	14.567	13523*	42	23.422	17.958
13236	10	19.170	5.774	13308	11	17.445	8.792	13380	28	15.532	11.739	13452	12	2.519	15.234	13524	20	24.017	17.720
13237	10	20.200	5.333	13309	12	18.458	8.706	13381	16	16.214	11.032	13453	42	2.524	15.516	13525	27	25.256	17.770
13238	12	21.227	5.752	13310	20	19.292	8.030	13382	13	16.670	11.000	13454	57	4.394	15.743	13526	24	0.030	18.977
13239	13	22.212	5.555	13311	46	19.465	8.618	13383	22	17.362	11.491	13455	10	7.078	15.064	13527	11	0.784	18.495
13240*	72	22.401	5.428	13312	31	19.516	8.754	13384	20	18.174	11.313	13456	11	7.196	15.372	13528	29	2.634	18.882
13241	18	24.934	5.376	13313	14	20.765	8.276	13385	35	18.326	11.089	13457	38	8.306	15.162	13529	14	5.077	18.756
13242	10	2.329	6.020	13314	21	21.416	8.513	13386	15	19.010	11.294	13458	33	8.506	15.730	13530	13	5.329	18.616
13243	22	2.498	6.098	13315	11	22.430	8.150	13387	15	19.638	11.094	13459	15	9.518	15.522	13531	12	5.798	18.600
13244	10	2.947	6.566	13316	11	23.812	8.057	13388	12	22.111	11.148	13460	35	9.950	15.747	13532*	71	7.290	18.588
13245	17	4.396	6.500	13317	25	24.626	8.229	13389	24	22.728	11.915	13461	13	11.233	15.034	13533	14	7.456	18.628
13246	26	7.285	6.522	13318*	71	25.035	8.864	13390	14	23.778	11.489	13462	27	11.823	15.113	13534	20	9.290	18.750
13247	34	7.752	6.305	13319	13	1.387	9.782	13391	14	23.812	11.226	13463	13	11.913	15.709	13535*	77	10.778	18.164
13248	10	9.156	6.930	13320	11	1.644	9.957	13392	27	24.008	11.479	13464	23	11.970	15.350	13536	9	10.841	18.590
13249	25	9.442	6.366	13321	22	2.426	9.138	13393*	40	24.652	11.557	13465	13	12.185	15.924	13537	10	11.838	18.560
13250*	96	9.780	6.263	13322	10	2.524	9.066	13394	32	25.456	11.582	13466	31	12.196	15.426	13538	37	13.364	18.516
13251	27	9.830	6.600	13323	13	2.529	9.750	13395	12	25.528	11.626	13467	13	13.286	15.317	13539*	56	16.289	18.448
13252	21	10.125	6.189	13324	13	3.087	9.622	13396	12	1.844	12.354	13468	9	13.690	15.736	13540	24	17.212	18.901
13253*	64	10.138	6.522	13325	10	5.535	9.936	13397	57	1.916	12.638	13469	13	14.116	15.113	13541	43	18.589	18.628
13254	26	10.763	6.144	13326*	71	5.548	9.632	13398	12	2.030	12.894	13470	13	17.170	15.658	13542	24	18.694	18.010
13255	30	13.352	6.852	13327	21	6.036	9.451	13399	23	4.268	12.573	13471	22	17.578	15.332	13543	19	19.420	18.156
13256	40	13.397	6.425	13328	10	6.231	9.444	13400	10	5.034	12.312	13472	43	18.131	15.004	13544	33	24.650	18.674
13257	12	18.033	6.548	13329	61	7.309	9.967	13401	42	5.999	12.106	13473	22	20.700	15.418	13545	15	0.136	19.192
13258	42	21.120	6.163	13330	13	7.769	9.232	13402	14	6.187	12.130	13474	24	21.646	15.146	13546	15	2.360	19.118
13259	17	23.614	6.249	13331	9	10.111	9.022	13403	11	6.168	12.544	13475	14	22.272	15.395	13547	54	3.465	19.355
13260	42	23.676	6.400	13332	13	10.723	9.824	13404	23	6.240	12.228	13476	17	22.342	15.574	13548	22	6.085	19.620
13261	11	25.178	6.994	13333	45	10.779	9.703	13405	19	8.500	12.162	13477*	67	22.342	15.505	13549*	63	6.584	19.563
13262*	47	0.592	7.806	13334	29	13.944	9.563	13406	54	9.588	12.997	13478	15	24.798	15.832	13550	11	8.480	19.732
13263	25	1.181	7.684	13335	53	14.274	9.649	13407	12	10.966	12.221	13479	21	25.019	15.242	13551	22	8.783	19.224
13264	10	4.222	7.534	13336	9	14.663	9.927	13408	23	16.237	12.047	13480	38	0.484	16.702	13552	22	8.840	19.998
13265	13	4.260	7.058	13337	20	17.790	9.764	13409	24	18.332	12.206	13481	27	0.860	16.578	13553	14	10.474	19.431
13266	25	4.866	7.752	13338	41	19.336	9.807	13410	39	18.904	12.018	13482	49	2.618	16.443	13554	11	13.868	19.738
13267	28	8.790	7.642	13339	28	25.248	9.608	13411	38	21.462	12.806	13483	44	4.220	16.426	13555	21	14.378	19.634
13268	10	9.078	7.584	13340	14	3.912	10.066	13412	18	0.278	13.246	13484	14	6.451	16.392	13556	10	18.918	19.600
13269	15	9.828	7.398	13341*	46	3.989	10.800	13413	28	0.726	13.386	13485	12	7.244	16.080	13557	49	20.780	19.701
13270	14	10.162	7.272	13342	25	5.107	10.540	13414	11	2.868	13.874	13486	20	10.002	16.156	13558	10	20.866	19.223
13271*	60	10.318	7.764	13343	12	6.280	10.974	13415	22	2.930	13.950	13487	24	10.689	16.186	13559	10	21.332	19.843
13272	11	11.427	7.631	13344	19	6.654	10.852	13416	23	5.362	13.622	13488*	74	12.922	16.440	13560*	39	21.354	19.280
13273	39	12.919	7.070	13345	12	6.794	10.150	13417	12	5.860	13.439	13489	10	16.002	16.214	13561	30	8.046	20.964
13274*	78	14.243	7.736	13346	35	7.784	10.766	13418	16	6.776	13.534	13490	10	17.242	16.374	13562*	63	8.707	20.878
13275	25	15.083	7.291	13347	11	8.606	10.242	13419	10	8.464	13.513	13491	11	17.676	16.058	13563	14	9.224	20.800
13276	29	15.430	7.684	13348	36	10.278	10.550	13420	13	8.550	13.158	13492	25	17.854	16.494	13564	10	9.285	20.408
13277	18	16.409	7.820	13349	31	11.314	10.322	13421	14	8.965	13.878	13493	23	18.091	16.616	13565	11	9.800	20.245
13278*	62	17.675	7.156	13350	16	11.406	10.515	13422	26	9.410	13.430	13494	30	18.412	16.052	13566	9	9.936	20.294
13279	23	18.020	7.652	13351	19	12.666	10.196	13423	26	9.852	13.006	13495	14	18.796	16.078	13567	42	9.968	20.244
13280	14	19.240	7.949	13352	14	12.686	10.644	13424	18	11.927	13.680	13496	12	18.840	16.798	13568	18	11.713	20.104
13281	29	19.280	7.058	13353	11	14.356	10.760	13425	13	12.166	13.057	13497	26	20.773	16.350	13569	10	15.133	20.025
13282	54	22.408	7.038	13354	48	14.692	10.516	13426	14	12.928	13.864	13498	11	22.866	16.888	13570	27	15.620	20.616
13283	41	22.668	7.890	13355	51	15.134	10.633	13427	16	13.734	13.066	13499	71	25.400	16.726	13571	36	16.744	20.146
13284	11	23.456	7.200	13356	30	17.010	10.166	13428	33	13.836	13.576	13500	42	25.706	16.395	13572	32	16.824	20.436
13285	45	23.686	7.971	13357	49	17.227	10.574	13429	9	18.700	13.933	13501	21	3.036	17.122	13573	28	17.692	20.339
13286	35	23.847	7.376	13358	10	17.907	10.786	13430	10	19.284	13.739	13502	27	4.473	17.626	13574	18	19.098	20.124
13287	14	24.042	7.082	13359	21	18.172	10.308	13431	16	19.361	13.574	13503	34	5.644	17.638	13575*	67	22.283	20.784
13288	15	24.102	7.194	13360	26	19.972	10.137	13432	42	20.268	13.200	13504	14	6.764	17.306	13576	20	23.322	20.254
13289	13	24.280	7.321	13361	14	21.702	10.482	13433	45	22.085	13.491	13505	11	7.532	17.107	13577	10	1.857	21.189
13290	25	0.225	8.650	13362	49	23.953	10.561	13434	42	0.876	14.236	13506	15	7.983	17.452	13578	14	1.914	21.715
13291	10	3.398	8.234	13363	22	24.128	10.134	13435	27	1.646	14.698	13507	9	8.490	17.772	13579	27	2.062	21.864
13292	19	5.924	8.492	13364	32														



13590	25	12-554	21-888	<div>R.A. 6<sup>h</sup> 20<sup>m</sup></div> <div>Plate 928; 1916 Dec. 20.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>-02563 +00023 +3265</div> <div>D E F</div> <div>-00034 -02601 -2406</div> <div>Mag.=16.6-1.09√d</div>	13756	13	10-467	3-166	13828	14	2-180	6-274	13900	9	4-036	9-034
13591	28	12-796	21-739		13757	9	10-610	3-216	13829	9	3-188	6-720	13901	25	11-330	9-602
13592	13	12-881	21-983		13758	9	10-736	3-542	13830	13	5-754	6-298	13902	32	15-916	9-738
13593	17	17-894	21-392		13759	21	10-839	3-327	13831	23	7-975	6-958	13903	12	17-164	9-074
13594	30	20-670	21-386		13760	17	11-028	3-086	13832	13	9-800	6-990	13904	9	18-898	9-752
13595	18	22-032	21-041		13761	20	11-038	3-905	13833	25	10-810	6-790	13905	8	22-582	9-290
13596	23	3-961	22-883		13762	8	11-598	3-012	13834	10	10-908	6-023	13906	14	22-793	9-035
13597	19	5-260	22-804		13763	22	12-834	3-865	13835	14	12-935	6-539	13907	12	23-182	9-628
13598	22	5-420	22-500		13764	10	13-534	3-065	13836	31	14-750	6-091	13908	13	1-851	10-958
13599	21	6-101	22-656		13765	11	13-791	3-998	13837	17	15-352	6-284	13909	36	1-984	10-292
13600	11	6-154	22-384	13766	30	13-896	3-358	13838	16	15-960	6-313	13910	26	2-682	10-262	
13601	14	6-686	22-170	13767	22	14-296	3-411	13839	46	17-033	6-566	13911	10	3-158	10-022	
13602	20	8-116	22-917	13768	8	14-684	3-541	13840	13	18-098	6-740	13912	27	4-730	10-098	
13603	19	8-910	22-383	13769	8	15-255	3-541	13841	33	18-896	6-641	13913*	44	6-386	10-220	
13604	33	9-534	22-586	13770	36	15-286	3-642	13842	14	18-924	6-362	13914	20	8-768	10-746	
13605	13	11-626	22-595	13771	10	16-046	3-827	13843	15	22-268	6-200	13915*	46	8-796	10-120	
13606	12	14-581	22-636	13772	31	16-234	3-383	13844	8	22-884	6-262	13916	12	9-996	10-860	
13607	14	15-931	22-080	13773	9	16-274	3-995	13845	9	23-756	6-252	13917	20	10-477	10-173	
13608	14	17-866	22-229	13774	10	16-876	3-474	13846	21	24-007	6-883	13918	17	11-045	10-464	
13609	23	19-030	22-314	13775	18	19-992	3-207	13847	8	0-448	7-892	13919	27	11-507	10-212	
13610	17	19-110	22-814	13776	11	21-905	3-634	13848	36	0-682	7-632	13920	19	11-609	10-222	
13611	44	19-872	22-958	13777	22	22-796	3-610	13849	40	1-700	7-702	13921	8	13-388	10-119	
13612	31	20-635	22-672	13778	30	24-837	3-153	13850	11	1-826	7-792	13922	10	13-797	10-610	
13613	20	21-328	22-654	13779	26	25-024	3-025	13851	35	1-857	7-107	13923	21	14-368	10-702	
13614	14	24-229	22-582	13780	32	3-148	4-490	13852	15	2-292	7-051	13924	34	15-982	10-074	
13615	13	7-332	23-998	13781	14	3-244	4-308	13853	27	2-646	7-955	13925	10	16-036	10-248	
13616	9	7-483	23-144	13782	10	5-374	4-100	13854	8	3-040	7-360	13926	8	16-588	10-180	
13617	31	8-370	23-792	13783	28	5-766	4-447	13855	21	4-792	7-100	13927	30	17-020	10-115	
13618	38	9-006	23-253	13784	13	6-744	4-220	13856	8	4-932	7-862	13928	11	17-594	10-664	
13619	15	12-976	23-154	13785	22	7-732	4-086	13857	12	5-634	7-440	13929	8	18-036	10-542	
13620	29	14-056	23-358	13786	26	8-845	4-922	13858	15	6-188	7-902	13930	10	18-276	10-874	
13621	15	14-330	23-112	13787	8	9-840	4-482	13859	11	8-742	7-302	13931	10	18-901	10-579	
13622	38	14-920	23-091	13788	9	12-560	4-788	13860	28	8-813	7-958	13932*	44	19-665	10-736	
13623	21	18-106	23-052	13789	14	13-518	4-852	13861*	48	8-904	7-526	13933	21	20-583	10-293	
13624*	140	18-138	23-600	13790	14	14-209	4-636	13862	14	11-988	7-670	13934	17	20-661	10-352	
13625	11	18-570	23-255	13791	32	15-052	4-798	13863	24	12-474	7-158	13935	12	21-814	10-479	
13626	22	18-988	23-322	13792	8	15-840	4-401	13864	9	13-270	7-114	13936	13	24-725	10-650	
13627	10	21-939	23-746	13793	9	16-047	4-532	13865	8	13-421	7-656	13937	20	25-035	10-550	
13628	25	24-053	23-268	13794	19	17-014	4-630	13866	14	13-886	7-641	13938	15	0-772	11-654	
13629	13	2-270	24-147	13795	18	21-146	4-340	13867	22	14-191	7-220	13939	10	1-820	11-222	
13630	31	4-228	24-052	13796	14	24-194	4-743	13868	25	14-206	7-362	13940	18	2-048	11-208	
13631	24	8-144	24-335	13797	31	24-358	4-145	13869*	49	16-920	7-570	13941*	33	2-693	11-280	
13632	29	11-904	24-915	13798	10	0-212	5-302	13870	38	17-422	7-064	13942	29	3-497	11-301	
13633	51	14-440	24-176	13799	51	0-395	5-171	13871	15	23-462	7-544	13943	11	3-568	11-347	
13634	33	14-612	24-644	13800	15	1-620	5-983	13872	19	24-236	7-716	13944	8	4-789	11-374	
13635	21	21-221	24-065	13801	10	2-892	5-767	13873	13	25-390	7-101	13945	9	6-819	11-151	
13636	10	21-634	24-854	13802	18	2-932	5-100	13874*	47	3-052	8-588	13946	10	6-928	11-006	
13637	14	21-768	24-669	13803	16	4-360	5-576	13875	8	4-549	8-686	13947	14	6-986	11-736	
13638	33	0-081	25-900	13804*	44	5-948	5-378	13876	21	6-684	8-279	13948	18	7-130	11-914	
13639	30	1-224	25-298	13805	10	8-550	5-300	13877	10	7-157	8-668	13949	10	7-833	11-932	
13640	42	3-285	25-938	13806	25	8-626	5-965	13878	8	7-283	8-653	13950	17	9-276	11-758	
13641	26	7-388	25-520	13807	8	12-278	5-870	13879	27	7-424	8-510	13951*	50	10-650	11-800	
13642	18	7-500	25-520	13808	29	14-894	5-448	13880	31	7-516	8-164	13952	12	10-888	11-637	
13643*	27	7-542	25-720	13809	11	15-091	5-301	13881	13	7-662	8-580	13953	15	11-071	11-271	
13644	25	7-782	25-596	13810*	40	15-268	5-750	13882	35	7-924	8-858	13954	21	11-794	11-023	
13645	23	9-838	25-267	13811	29	15-932	5-250	13883	10	10-367	8-886	13955	13	12-510	11-856	
13646	19	9-873	25-942	13812	35	17-342	5-318	13884	11	11-963	8-717	13956	12	12-662	11-448	
13647	23	13-910	25-182	13813	8	17-538	5-498	13885	8	13-178	8-144	13957	11	15-548	11-168	
13648	14	19-522	25-128	13814	8	18-126	5-972	13886	30	13-462	8-730	13958	14	15-610	11-290	
13649	9	20-092	25-670	13815	35	18-530	5-616	13887	13	13-934	8-334	13959	19	15-704	11-528	
13650	17	23-372	25-391	13816	26	18-598	5-766	13888	9	16-414	8-876	13960	10	16-216	11-373	
13651	14	24-367	25-778	13817	31	21-598	5-974	13889	31	18-524	8-358	13961*	40	17-826	11-472	
13652	27	25-286	25-256	13818	10	22-315	5-552	13890	11	19-749	8-263	13962	24	17-910	11-218	
				13819	28	23-430	5-686	13891	8	20-886	8-270	13963	11	19-552	11-250	
				13820	16	24-040	5-923	13892	25	22-364	8-520	13964	10	20-191	11-581	
				13821	15	25-659	5-998	13893	9	23-659	8-036	13965	26	20-751	11-492	
				13822	17	25-710	5-703	13894	8	23-974	8-742	13966				



13972*	36	6.166	12.212	14044	10	0.340	15.142	14116	10	6.690	18.650	14188	27	15.698	21.780	14260	11	4.428	25.086
13973	18	6.643	12.907	14045	52	0.404	15.248	14117	24	7.373	18.304	14189	12	15.731	21.986	14261	61	11.052	25.601
13974*	35	6.804	12.237	14046	14	0.412	15.316	14118	23	7.746	18.442	14190	18	16.022	21.498	14262	10	14.422	25.336
13975	10	6.824	12.379	14047	9	1.664	15.831	14119	10	7.765	18.860	14191	15	16.112	21.655	14263	8	15.554	25.160
13976	16	9.138	12.667	14048	10	2.872	15.550	14120	12	8.042	18.126	14192	16	16.225	21.375	14264	9	18.350	25.476
13977	8	9.430	12.550	14049	10	4.580	15.251	14121	22	11.328	18.854	14193	18	16.780	21.450	14265	52	18.720	25.494
13978	13	10.096	12.234	14050	18	7.340	15.798	14122	12	11.756	18.426	14194	35	17.351	21.865	14266	28	20.270	25.528
13979	14	12.442	12.530	14051	9	8.370	15.760	14123	16	12.483	18.366	14195	8	20.351	21.455	14267	49	20.421	26.000
13980	21	12.543	12.678	14052	31	9.546	15.796	14124	10	13.024	18.782	14196*	69	23.840	21.038	14268	20	20.734	25.974
13981*	42	13.230	12.226	14053	15	12.094	15.400	14125	23	13.298	18.450	14197	12	24.238	21.464	14269	33	21.521	25.712
13982	15	16.696	12.682	14054	16	12.438	15.842	14126	13	13.816	18.182	14198	9	24.287	21.676	14270	11	22.203	25.516
13983	12	17.214	12.558	14055	12	12.637	15.576	14127	12	17.252	18.052	14199	16	2.179	22.999	14271	52	24.944	25.718
13984	10	17.509	12.746	14056	13	12.936	15.801	14128	29	18.597	18.517	14200	14	2.352	22.307	14272	29	25.153	25.264
13985	16	19.600	12.633	14057	10	13.482	15.353	14129	31	19.400	18.352	14201	11	7.619	22.748	14273	19	25.218	25.898
13986	12	19.678	12.271	14058	9	14.132	15.932	14130	14	20.478	18.987	14202	14	8.635	22.550	14274	9	25.276	25.906
13987	8	20.566	12.147	14059	11	15.508	15.300	14131	15	22.525	18.418	14203	26	9.461	22.638				
13988	10	20.792	12.253	14060*	71	18.838	15.548	14132	17	1.426	19.990	14204	29	9.672	22.382				
13989*	46	21.342	12.048	14061	34	19.491	15.030	14133	17	7.368	19.470	14205	29	15.864	22.425				
13990	9	21.700	12.895	14062	11	20.310	15.093	14134	19	10.350	19.924	14206	10	16.670	22.200				
13991*	50	22.985	12.878	14063	40	20.571	15.108	14135	13	10.904	19.096	14207	27	17.734	22.422				
13992	40	25.564	12.356	14064	12	21.145	15.692	14136	15	11.122	19.480	14208	15	18.149	22.916				
13993	35	0.138	13.236	14065	14	21.721	15.325	14137	17	13.280	19.644	14209	35	18.706	22.504				
13994	43	0.512	13.796	14066	9	21.971	15.564	14138	12	14.168	19.054	14210	11	22.018	22.388				
13995	12	1.692	13.930	14067	10	22.498	15.398	14139	29	15.166	19.279	14211	17	22.200	22.474				
13996	10	4.554	13.914	14068	10	25.186	15.332	14140	10	15.248	19.900	14212	12	22.413	22.644				
13997	9	5.174	13.994	14069	8	0.944	16.626	14141	26	16.384	19.604	14213	10	22.691	22.099				
13998*	52	7.433	13.010	14070	10	1.321	16.282	14142	8	18.390	19.740	14214	26	6.186	23.271				
13999	10	8.994	13.166	14071*	51	3.470	16.447	14143	14	19.756	19.927	14215	36	7.714	23.605				
14000*	31	11.018	13.512	14072	33	3.784	16.113	14144	14	20.600	19.820	14216	11	8.380	23.204				
14001	10	11.183	13.344	14073	8	5.508	16.662	14145	8	20.901	19.706	14217	11	9.132	23.250				
14002*	30	11.763	13.452	14074	9	6.102	16.314	14146	26	20.902	19.214	14218	17	9.472	23.432				
14003	27	11.896	13.694	14075	22	6.436	16.800	14147	10	21.038	19.644	14219	14	9.833	23.122				
14004	14	12.496	13.801	14076	18	6.444	16.953	14148	23	21.535	19.670	14220	13	11.772	23.225				
14005	12	13.448	13.744	14077	10	7.742	16.732	14149	23	22.707	19.868	14221	28	12.483	23.446				
14006	9	14.008	13.950	14078	10	10.960	16.274	14150*	47	25.004	19.800	14222*	42	12.574	23.606				
14007	32	15.370	13.039	14079	11	14.660	16.055	14151	15	0.140	20.783	14223	11	13.022	23.192				
14008	10	16.952	13.030	14080	14	16.404	16.543	14152	48	0.385	20.526	14224	9	13.340	23.480				
14009	14	17.542	13.318	14081	9	18.765	16.608	14153	9	2.500	20.579	14225	10	14.113	23.142				
14010	8	17.818	13.539	14082	10	19.690	16.973	14154	14	4.754	20.628	14226	13	15.493	23.380				
14011	17	20.622	13.729	14083	19	20.362	16.153	14155	18	6.532	20.007	14227	27	15.792	23.144				
14012	20	20.646	13.486	14084	13	21.793	16.022	14156	10	6.621	20.370	14228*	43	16.378	23.394				
14013	8	21.708	13.652	14085	35	23.806	16.728	14157	12	6.993	20.794	14229	20	17.544	23.952				
14014	18	21.756	13.934	14086	14	0.263	17.006	14158	12	7.110	20.102	14230	8	17.638	23.017				
14015	17	22.193	13.112	14087	28	1.258	17.728	14159	18	10.247	20.508	14231	9	21.640	23.848				
14016	12	24.326	13.307	14088*	35	1.508	17.692	14160	8	10.603	20.256	14232	15	23.224	23.692				
14017	12	24.828	13.529	14089	13	2.102	17.447	14161	20	12.023	20.224	14233	19	24.818	23.893				
14018	11	0.224	14.250	14090	10	2.857	17.164	14162	26	13.258	20.726	14234	45	25.505	23.932				
14019	13	1.712	14.612	14091	20	3.343	17.490	14163	23	14.508	20.213	14235	21	3.429	24.977				
14020	20	2.746	14.290	14092	34	5.550	17.068	14164*	44	14.510	20.194	14236	40	5.416	24.056				
14021	16	3.086	14.963	14093	37	8.526	17.728	14165	9	16.684	20.409	14237	36	5.470	24.842				
14022	36	4.237	14.864	14094	8	9.804	17.456	14166	8	17.046	20.950	14238	27	7.094	24.454				
14023	22	4.313	14.383	14095	31	10.370	17.088	14167	18	17.682	20.374	14239	24	7.164	24.714				
14024	13	5.934	14.104	14096	17	11.248	17.377	14168	34	19.512	20.244	14240	12	7.716	24.105				
14025	14	5.968	14.076	14097	8	14.289	17.408	14169	12	23.276	20.876	14241	9	8.078	24.054				
14026	19	6.376	14.078	14098	21	14.869	17.517	14170	11	24.668	20.010	14242	35	10.412	24.507				
14027	13	6.665	14.062	14099	11	15.095	17.476	14171	8	0.654	21.242	14243	9	10.522	24.813				
14028	9	6.955	14.185	14100	17	15.930	17.009	14172	22	4.204	21.138	14244	9	10.556	24.628				
14029	8	8.137	14.572	14101	12	16.960	17.176	14173	13	4.744	21.688	14245	10	13.248	24.106				
14030	11	9.026	14.034	14102	8	17.646	17.691	14174*	53	5.588	21.727	14246	11	15.270	24.110				
14031	11	9.585	14.418	14103	29	19.773	17.400	14175	32	7.343	21.594	14247	12	16.216	24.284				
14032	30	12.793	14.422	14104	13	19.844	17.502	14176	14	7.702	21.340	14248	17	18.225	24.750				
14033	11	12.914	14.710	14105	8	19.977	17.200	14177	22	8.446	21.253	14249	18	18.757	24.966				
14034	11	13.856	14.406	14106	11	20.948	17.646	14178	40	9.063	21.540	14250	14	19.514	24.346				
14035	9	14.038	14.139	14107	9	20.937	17.310	14179	27	9.760	21.896	14251	25	20.026	24.120				
14036	17	15.207	14.908	14108	15	21.020	17.538	14180	14	10.018	21.800	14252	19	20.124	24.116				
14037	14	16.991	14.206	14109	11	21.132	17.623	14181	18	10.284	21.294	14253	37	20.141	24.332				
14038	29	18.034	14.592	14110	14	21.847	17.133	14182	12	10.376	21.968	14254	9	22.023	24.554				
14039	22	19.329	14.329	14111*	56	21.993	17.037	14183*	87	11.537	21.009	14255	41	24.214	24.624				



14336	8	13.805	2.883	14408	8	12.902	6.781	14480	22	24.343	9.506	14552	13	17.298	13.170	14624	16	16.474	17.564
14337	32	14.888	2.913	14409	23	13.358	6.050	14481	22	24.695	9.374	14553	21	17.932	13.784	14625	9	16.648	17.476
14338	23	15.592	2.085	14410	35	13.664	6.260	14482	16	2.416	10.630	14554	13	19.308	13.448	14626	20	18.344	17.066
14339	20	17.146	2.110	14411	22	14.022	6.088	14483	27	2.724	10.524	14555*	40	19.397	13.938	14627	33	18.351	17.840
14340	10	18.410	2.124	14412	32	15.563	6.316	14484*	44	3.786	10.767	14556	33	22.191	13.930	14628	10	18.653	17.084
14341	16	20.308	2.129	14413	15	15.654	6.838	14485	42	4.994	10.972	14557	9	22.999	13.752	14629	20	19.980	17.126
14342	13	22.256	2.494	14414	8	17.714	6.406	14486	11	7.027	10.961	14558	20	25.414	13.282	14630	39	22.234	17.822
14343	16	0.360	3.628	14415	11	18.198	6.050	14487	23	9.523	10.647	14559	8	25.758	13.918	14631	13	22.350	17.746
14344	33	2.396	3.132	14416	25	18.260	6.385	14488	13	9.606	10.654	14560	31	0.246	14.312	14632	47	22.785	17.710
14345	31	2.578	3.000	14417	10	18.617	6.919	14489	22	13.482	10.310	14561	17	1.482	14.870	14633*	72	23.899	17.086
14346	21	3.613	3.468	14418	33	19.234	6.859	14490	25	16.074	10.206	14562	9	3.028	14.474	14634	13	23.982	17.420
14347	27	3.751	3.878	14419	26	24.123	6.654	14491	11	16.680	10.770	14563*	60	6.891	14.106	14635	28	25.205	17.134
14348	27	5.474	3.969	14420	14	1.094	7.549	14492	40	17.258	10.616	14564	42	7.300	14.320	14636	15	0.354	18.435
14349	8	6.228	3.165	14421	23	1.873	7.707	14493	8	18.313	10.706	14565	8	8.372	14.244	14637	9	2.384	18.645
14350	28	7.290	3.037	14422	16	3.018	7.072	14494	17	20.260	10.899	14566	11	8.392	14.853	14638	10	3.156	18.854
14351	9	9.097	3.498	14423	35	4.037	7.387	14495	37	22.128	10.652	14567	15	9.618	14.256	14639	24	5.792	18.848
14352	21	9.844	3.776	14424	8	4.504	7.160	14496	21	22.324	10.570	14568*	39	10.732	14.220	14640	10	10.227	18.248
14353	35	11.845	3.705	14425	32	5.060	7.382	14497	10	1.226	11.718	14569	34	12.710	14.919	14641	24	11.773	18.092
14354	21	13.449	3.831	14426	28	5.493	7.352	14498	17	1.786	11.910	14570	12	13.756	14.620	14642	8	12.132	18.058
14355	8	16.325	3.634	14427	12	5.916	7.304	14499	39	6.060	11.158	14571	11	14.433	14.324	14643	8	12.290	18.389
14356	8	18.612	3.782	14428	8	6.226	7.510	14500	22	8.764	11.236	14572	13	14.561	14.446	14644	22	13.504	18.728
14357*	49	22.415	3.260	14429	28	6.308	7.983	14501	21	9.045	11.844	14573	14	15.860	14.175	14645	16	14.056	18.107
14358	18	23.854	3.904	14430	10	6.322	7.740	14502	20	11.323	11.729	14574	9	16.816	14.432	14646	15	15.408	18.457
14359*	48	23.924	3.709	14431	10	6.698	7.705	14503	8	12.416	11.149	14575	34	17.828	14.716	14647	11	16.310	18.263
14360	8	25.390	3.329	14432	26	7.522	7.054	14504	12	12.560	11.981	14576	25	18.256	14.224	14648	29	17.634	18.725
14361	10	25.766	3.326	14433	23	8.566	7.770	14505	8	15.570	11.508	14577	23	18.624	14.348	14649*	53	19.818	18.945
14362	17	1.781	4.735	14434	18	9.286	7.158	14506	36	15.869	11.386	14578	8	19.035	14.598	14650	35	23.256	18.576
14363	32	1.934	4.132	14435	21	11.589	7.994	14507	12	15.944	11.362	14579	25	19.800	14.804	14651	25	0.564	19.882
14364*	36	5.705	4.900	14436	27	12.258	7.896	14508	14	16.995	11.627	14580*	95	24.796	14.288	14652	13	2.526	19.993
14365	23	6.006	4.558	14437	9	14.664	7.599	14509	8	17.132	11.740	14581	9	0.272	15.419	14653*	48	2.855	19.774
14366	9	6.237	4.745	14438	8	15.140	7.066	14510	8	17.760	11.341	14582	9	2.959	15.308	14654	11	4.587	19.974
14367	32	7.564	4.794	14439	15	16.052	7.593	14511	34	19.154	11.771	14583	8	7.339	15.574	14655	27	5.576	19.061
14368	8	7.840	4.956	14440	22	16.246	7.982	14512	31	19.254	11.602	14584	9	14.824	15.146	14656	22	8.116	19.106
14369	24	8.422	4.767	14441	8	17.093	7.013	14513	10	19.531	11.760	14585	8	16.115	15.756	14657	11	9.719	19.940
14370	22	9.894	4.510	14442	15	19.194	7.687	14514	13	19.772	11.455	14586	34	16.556	15.960	14658	9	11.376	19.514
14371	9	11.534	4.719	14443	13	19.722	7.914	14515	18	19.814	11.256	14587	14	16.594	15.890	14659	37	11.868	19.619
14372	28	11.750	4.534	14444	13	20.356	7.123	14516	28	21.078	11.055	14588	8	17.564	15.116	14660	37	14.658	19.726
14373	22	14.226	4.229	14445*	63	23.844	7.358	14517	10	21.604	11.892	14589	28	18.949	15.704	14661	23	15.690	19.935
14374	8	14.408	4.728	14446*	80	23.902	7.350	14518	25	22.986	11.778	14590	24	20.740	15.322	14662	13	15.960	19.496
14375	24	15.625	4.364	14447	12	24.964	7.370	14519*	48	0.708	12.888	14591	20	20.960	15.356	14663	11	18.458	19.190
14376	23	15.845	4.298	14448	10	25.266	7.970	14520	40	3.283	12.320	14592	41	21.235	15.796	14664	8	19.520	19.850
14377	25	23.298	4.700	14449	19	0.015	8.544	14521	33	6.666	12.654	14593	14	21.534	15.940	14665	43	20.562	19.650
14378	14	25.956	4.900	14450	9	1.302	8.033	14522	24	7.564	12.150	14594	32	21.566	15.766	14666	39	22.014	19.560
14379	30	1.032	5.690	14451	18	8.431	8.592	14523	39	7.598	12.479	14595	16	21.825	15.728	14667	8	23.732	19.456
14380	11	1.645	5.918	14452	9	9.378	8.240	14524	31	8.662	12.400	14596	22	23.696	15.824	14668	24	23.888	19.252
14381	25	3.268	5.962	14453	21	10.567	8.286	14525	10	11.563	12.702	14597	39	1.604	16.723	14669	10	25.463	19.170
14382	23	3.314	5.664	14454	8	10.934	8.436	14526	22	14.960	12.125	14598	32	4.488	16.994	14670	12	1.150	20.880
14383*	52	5.686	5.851	14455	30	11.557	8.494	14527	15	16.623	12.835	14599	29	5.350	16.517	14671	10	6.004	20.678
14384	29	6.001	5.828	14456	37	17.802	8.799	14528	33	18.165	12.800	14600	35	8.130	16.337	14672	29	7.306	20.476
14385	8	6.402	5.542	14457	9	17.973	8.886	14529	29	18.908	12.776	14601	8	8.872	16.792	14673	8	8.122	20.649
14386*	41	6.442	5.412	14458	14	19.352	8.720	14530	31	20.098	12.654	14602	32	11.910	16.980	14674	8	9.674	20.508
14387	9	6.448	5.578	14459	12	22.366	8.710	14531	11	20.805	12.129	14603	35	13.316	16.559	14675	14	10.578	20.582
14388	21	10.240	5.140	14460	10	24.130	8.855	14532	8	21.443	12.346	14604	15	13.668	16.140	14676	12	11.844	20.108
14389	10	10.472	5.714	14461	13	24.278	8.150	14533	23	21.485	12.204	14605	24	13.835	16.802	14677	29	13.003	20.788
14390	12	10.640	5.576	14462	12	24.938	8.202	14534	10	21.554	12.544	14606	9	16.112	16.732	14678*	41	13.496	20.412
14391	35	11.536	5.847	14463	13	0.454	9.050	14535	40	21.810	12.634	14607	42	16.231	16.542	14679*	34	13.831	20.560
14392	25	16.214	5.600	14464	12	0.854	9.638	14536	32	23.923	12.600	14608	21	16.974	16.206	14680	10	14.572	20.556
14393	10	19.706	5.609	14465	29	6.106	9.511	14537	26	24.000	12.312	14609	23	18.903	16.039	14681	18	15.244	20.866
14394*	42	21.834	5.437	14466	10	6.580	9.786	14538	36	24.150	12.019	14610	26	19.794	16.194	14682	8	16.133	20.812
14395	8	23.862	5.244	14467	16	6.655	9.053	14539	33	24.536	12.243	14611	10	20.774	16.932	14683	11	18.430	20.954
14396	41	24.271	5.147	14468	8	7.636	9.270	14540	10	24.608	12.384	14612	8	22.178	16.378	14684	22	23.878	20.194
14397	8	25.790	5.344	14469	16	12.296	9.484	14541	25	24.934	12.102	14613	9	22.206	16.045	14685	16	25.520	20.369
14398	8	1.369	6.250	14470	8	12.895	9.572	14542	12	2.066	13.297	14614							



14696	15	11.078	21.156	14768	8	7.672	25.982	14839	12	20.300	1.966	14911	12	22.006	4.614	14983	9	25.158	7.314
14697	9	16.946	21.330	14769	9	7.726	25.734	14840	13	22.088	1.579	14912*	55	23.497	4.181	14984	15	0.396	8.910
14698	43	20.764	21.707	14770	13	7.840	25.008	14841*	35	22.088	1.668	14913	34	24.454	4.155	14985	19	2.304	8.336
14699	39	20.980	21.280	14771	23	10.912	25.640	14842	14	24.842	1.200	14914	9	25.706	4.354	14986	27	2.064	8.386
14700	10	21.792	21.486	14772	8	11.140	25.776	14843	17	0.238	2.699	14915	15	1.864	5.436	14987	21	3.290	8.150
14701	22	23.067	21.615	14773	10	13.767	25.442	14844	18	4.098	2.134	14916	44	2.268	5.336	14988	11	4.166	8.160
14702	12	0.106	22.500	14774	23	15.854	25.380	14845	10	4.548	2.585	14917	25	3.955	5.072	14989	35	5.350	8.700
14703	9	0.320	22.660	14775	10	19.466	25.694	14846	17	5.966	2.226	14918	21	4.251	5.766	14990	24	7.756	8.236
14704	8	0.587	22.109	14776	30	19.476	25.414	14847*	108	6.008	2.514	14919	9	4.458	5.839	14991	23	9.120	8.480
14705	32	4.449	22.739	14777	36	20.545	25.098	14848	18	7.068	2.349	14920	15	5.296	5.632	14992	15	10.073	8.640
14706	15	5.007	22.712	14778	29	22.962	25.996	14849	26	7.497	2.085	14921	32	5.325	5.810	14993	25	13.150	8.890
14707	11	5.582	22.891	14779	40	24.654	25.714	14850	24	9.370	2.012	14922	13	7.400	5.994	14994	24	13.838	8.393
14708	11	6.432	22.446					14851	40	10.121	2.585	14923	19	7.834	5.827	14995	16	15.056	8.044
14709	38	8.421	22.462					14852	18	11.950	2.906	14924	31	8.525	5.034	14996	23	15.196	8.170
14710	20	8.494	22.718					14853	26	12.392	2.533	14925	14	8.987	5.860	14997	20	15.302	8.226
14711	8	11.881	22.908					14854	14	13.300	2.339	14926	16	9.556	5.366	14998	29	17.310	8.872
14712	8	13.688	22.654					14855	34	16.877	2.137	14927	8	10.350	5.962	14999	23	17.800	8.246
14713	34	15.080	22.272					14856*	41	17.154	2.771	14928	35	10.411	5.808	15000	30	18.262	8.708
14714	38	17.676	22.476					14857*	50	18.468	2.924	14929	22	11.322	5.662	15001	36	20.428	8.886
14715	25	18.352	22.218					14858*	44	20.884	2.072	14930	31	11.816	5.588	15002	41	20.553	8.144
14716	37	18.980	22.554					14859	20	21.286	2.626	14931	12	12.520	5.548	15003	15	21.206	8.862
14717	12	19.495	22.286					14860	10	22.349	2.978	14932	33	14.791	5.668	15004	15	21.624	8.386
14718*	69	19.637	22.532					14861*	35	25.286	2.238	14933	11	16.464	5.244	15005	14	22.170	8.474
14719	33	19.803	22.919					14862	10	25.724	2.380	14934	16	16.610	5.792	15006	21	22.300	8.645
14720	41	20.410	22.040					14863	10	25.814	2.110	14935	29	19.262	5.606	15007	27	22.316	8.102
14721	27	21.114	22.880					14864	47	0.400	3.463	14936	9	21.406	5.243	15008	11	22.360	8.380
14722	12	23.704	22.960					14865*	47	1.906	3.900	14937	30	22.504	5.766	15009	12	23.088	8.522
14723	24	24.145	22.184					14866	18	3.378	3.506	14938	17	22.984	5.846	15010	26	23.417	8.460
14724	15	1.150	23.694					14867	22	3.757	3.502	14939	11	23.671	5.912	15011	10	24.018	8.148
14725	25	2.752	23.871					14868	35	7.546	3.316	14940*	36	23.897	5.304	15012	12	24.678	8.593
14726*	41	3.436	23.899					14869*	42	7.988	3.923	14941	12	24.613	5.714	15013	8	1.166	9.746
14727	10	4.580	23.685					14870	22	8.001	3.934	14942	8	0.920	6.534	15014	18	1.634	9.576
14728	8	6.284	23.288					14871	35	9.834	3.698	14943	32	2.134	6.844	15015	22	2.161	9.044
14729	43	8.916	23.538					14872	9	10.516	3.667	14944*	50	4.289	6.014	15016	30	2.376	9.694
14730	8	9.566	23.692					14873	10	13.220	3.758	14945	9	7.192	6.612	15017	28	2.728	9.557
14731	27	11.276	23.510					14874	23	15.003	3.390	14946	21	8.130	6.246	15018	10	3.196	9.411
14732	21	11.978	23.346					14875	42	15.876	3.069	14947	24	10.618	6.785	15019	10	3.658	9.573
14733	25	12.468	23.284					14876	12	15.918	3.564	14948	17	11.461	6.348	15020	19	4.044	9.310
14734	8	12.796	23.492					14877	12	16.544	3.697	14949	11	12.834	6.975	15021	33	5.151	9.874
14735*	54	13.095	23.766					14878	27	17.920	3.136	14950	25	13.190	6.220	15022	11	7.026	9.514
14736	10	13.738	23.734					14879	27	18.776	3.142	14951	31	13.612	6.320	15023	10	7.116	9.852
14737	10	13.924	23.244					14880	19	19.007	3.004	14952	13	14.572	6.302	15024	20	8.402	9.969
14738*	49	14.147	23.404					14881	14	20.829	3.658	14953	21	17.494	6.400	15025	28	10.830	9.048
14739	14	16.561	23.016					14882	11	21.034	3.847	14954	11	18.811	6.394	15026	9	11.866	9.562
14740	26	17.396	23.256					14883	16	22.034	3.819	14955	26	19.857	6.374	15027	16	13.556	9.194
14741	10	18.942	23.560					14884	32	22.379	3.250	14956	33	21.493	6.244	15028	32	14.891	9.180
14742	25	20.005	23.301					14885	28	22.450	3.530	14957	19	21.632	6.940	15029	32	15.302	9.697
14743	17	21.780	23.823					14886	10	22.936	3.900	14958	14	22.636	6.326	15030	10	15.385	9.466
14744	9	23.246	23.204					14887	10	23.762	3.497	14959	39	22.842	6.272	15031	33	19.402	9.136
14745	37	2.154	24.610					14888	13	24.339	3.116	14960	9	23.014	6.420	15032	22	21.394	9.766
14746	23	7.320	24.520					14889	16	25.152	3.624	14961	11	23.446	6.987	15033	26	22.557	9.854
14747	10	8.133	24.710					14890	27	25.400	3.558	14962*	75	25.370	6.171	15034	33	22.560	9.714
14748	15	9.900	24.518					14891	27	1.295	4.894	14963*	64	1.854	7.548	15035	40	0.171	10.856
14749	16	9.987	24.906					14892	23	1.846	4.098	14964*	85	1.912	7.542	15036	24	0.364	10.775
14750	25	11.346	24.748					14893	9	3.757	4.019	14965	24	2.984	7.552	15037*	34	4.302	10.684
14751	31	11.922	24.709					14894	8	4.620	4.584	14966	8	4.145	7.028	15038	36	5.868	10.900
14752	30	12.376	24.042					14895	29	5.615	4.145	14967	31	4.592	7.942	15039	32	5.875	10.965
14753	8	15.766	24.694					14896	15	6.689	4.816	14968	8	6.323	7.034	15040	12	5.884	10.916
14754	23	15.854	24.026					14897	11	6.916	4.193	14969	21	6.996	7.134	15041	12	6.104	10.213
14755	39	15.914	24.892					14898	27	7.348	4.354	14970	15	7.384	7.738	15042	19	6.636	10.633
14756*	65	16.355	24.756					14899	26	8.572	4.305	14971	9	9.552	7.413	15043	25	10.288	10.020
14757*	48	18.350	24.768					14900	9	8.780	4.094	14972	13	9.670	7.480	15044	34	10.818	10.854
14758	32	19.189	24.114					14901	23	8.898	4.788	14973	9	9.815	7.588	15045	25	10.967	10.126
14759	11	19.619	24.852					14902	12	9.237	4.495	14974	10	11.480	7.016	15046	15	12.912	10.586
14760	30	21.186	24.371					14903	13	11.565	4.543	14975	16	14.594	7.374	15047	11	13.050	10.835
14761	8	23.935	24.330					14904	18	11.910	4.458	14976	25	15.205	7.465	15048	11	13.072	10.114
14762	28	24.698	24.572					14905	34	12.422	4.660	14977	39	15.596	7.677	15049	23	13.772	10.062
14763	43	2.903	25.692					14906	22	14.884	4.736	14978	12	15.810	7.566	15050	24	14.400	10.960
14764	32	3.112	25.236					14907	14	16.729	4.848	14979	17	20.586	7.477	15051	34	15.242	10.800
1																			



15055	8	18.142	10.510	15127	13	24.558	12.552	15199	8	3.544	15.186	15271	28	22.634	17.881	15343	10	2.828	20.786
15056	23	18.695	10.750	15128*	40	25.219	12.429	15200	35	4.748	15.800	15272	10	23.100	17.130	15344	24	3.640	20.548
15057	8	19.075	10.060	15129	13	25.625	12.167	15201*	42	5.727	15.068	15273	37	0.328	18.025	15345	33	4.204	20.746
15058	27	19.910	10.562	15130	8	0.486	13.585	15202	33	6.308	15.685	15274	37	1.357	18.772	15346	10	4.789	20.036
15059	11	20.510	10.878	15131	10	1.040	13.934	15203	29	12.245	15.600	15275	10	2.184	18.880	16347*	77	5.098	20.760
15060	15	22.124	10.652	15132	19	1.061	13.948	15204	24	12.822	15.225	15276	16	3.231	18.420	15348	22	5.590	20.108
15061	16	22.880	10.380	15133	10	1.796	13.663	15205	13	14.170	15.932	15277	16	4.826	18.637	15349	9	6.558	20.544
15062	14	23.451	10.346	15134	30	3.476	13.462	15206	19	15.416	15.554	15278	16	5.330	18.537	15350	12	6.844	20.536
15063	34	23.818	10.684	15135	8	3.830	13.294	15207	12	16.099	15.720	15279	8	5.848	18.932	15351	26	7.753	20.056
15064	9	24.314	10.512	15136	35	4.182	13.408	15208	13	18.015	15.218	15280	29	6.082	18.814	15352	12	8.825	20.630
15065	31	24.750	10.612	15137	23	6.272	13.892	15209	9	18.457	15.852	15281	16	6.834	18.964	15353	12	9.456	20.299
15066	36	24.863	10.610	15138	12	7.004	13.968	15210	12	18.566	15.463	15282	12	11.073	18.712	15354	32	10.286	20.887
15067	30	1.035	11.975	15139	16	9.576	13.532	15211*	49	19.782	15.402	15283	29	11.684	18.117	15355	20	13.194	20.761
15068	11	2.096	11.358	15140	21	9.633	13.530	15212	24	20.549	15.468	15284	11	11.731	18.412	15356	16	13.709	20.456
15069	16	3.190	11.505	15141	23	11.188	13.553	15213	17	21.174	15.224	15285	12	12.146	18.442	15357	17	14.850	20.628
15070	24	4.353	11.864	15142	11	11.440	13.654	15214	15	22.567	15.425	15286	15	12.170	18.461	15358	18	14.998	20.780
15071	34	5.555	11.621	15143*	46	11.996	13.342	15215	10	23.165	15.858	15287	30	15.060	18.780	15359	8	17.128	20.178
15072	12	5.770	11.347	15144	12	12.316	13.522	15216	22	24.018	15.908	15288	13	15.326	18.700	15360	34	18.145	20.201
15073	25	5.844	11.106	15145	22	12.404	13.222	15217	21	24.276	15.488	15289	21	15.770	18.182	15361*	52	18.496	20.415
15074	14	7.746	11.202	15146	12	14.215	13.898	15218	10	0.265	16.584	15290	11	15.918	18.384	15362	23	18.904	20.181
15075	24	7.799	11.590	15147	11	14.836	13.242	15219	26	1.776	16.016	15291	30	16.582	18.297	15363	17	20.576	20.496
15076	11	8.858	11.982	15148	21	14.932	13.596	15220	22	2.937	16.214	15292	14	16.898	18.494	15364	34	21.188	20.998
15077	22	9.174	11.168	15149	10	16.628	13.289	15221	29	5.339	16.238	15293	19	17.047	18.768	15365	13	21.216	20.332
15078	16	9.576	11.622	15150	26	17.580	13.770	15222	8	6.404	16.131	15294	11	17.232	18.272	15366	19	22.990	20.320
15079	25	9.984	11.170	15151	30	18.892	13.741	15223	11	6.373	16.754	15295	19	17.400	18.390	15367	13	25.506	20.755
15080	18	10.366	11.800	15152	13	19.658	13.535	15224	36	7.180	16.788	15296	8	17.684	18.726	15368	28	1.194	21.811
15081	25	11.558	11.019	15153	12	19.755	13.636	15225	16	9.386	16.685	15297	29	17.894	18.756	15369	8	1.477	21.076
15082	14	13.126	11.456	15154	21	19.941	13.399	15226	32	9.574	16.974	15298*	41	19.457	18.660	15370	17	5.514	21.824
15083	30	14.433	11.036	15155	10	21.581	13.276	15227	31	9.708	16.001	15299	26	20.270	18.930	15371	22	6.518	21.846
15084	9	14.706	11.838	15156	34	21.656	13.736	15228	14	9.836	16.012	15300	11	21.465	18.214	15372	31	7.055	21.992
15085	28	15.030	11.090	15157	33	0.255	14.134	15229	10	10.736	16.110	15301	30	22.258	18.028	15373	16	7.996	21.796
15086	17	16.557	11.240	15158*	100	2.858	14.473	15230	32	11.266	16.516	15302	9	22.420	18.495	15374	17	8.184	21.962
15087	23	17.046	11.026	15159	10	3.828	14.098	15231	16	11.415	16.786	15303	10	23.724	18.973	15375	10	8.348	21.516
15088*	35	18.268	11.856	15160	9	6.152	14.367	15232	26	13.044	16.148	15304	8	23.814	18.486	15376	22	8.544	21.346
15089	11	19.751	11.846	15161	24	6.678	14.821	15233	18	14.630	16.782	15305	16	24.424	18.158	15377	18	9.446	21.724
15090	8	19.928	11.630	15162	24	7.083	14.864	15234	23	17.490	16.387	15306*	70	24.545	18.922	15378	10	9.670	21.889
15091	14	21.264	11.279	15163	9	7.412	14.374	15235	13	17.592	16.542	15307	47	0.124	19.766	15379	20	10.250	21.514
15092	8	21.454	11.194	15164	14	7.883	14.648	15236	8	18.300	16.580	15308	12	1.845	19.648	15380	35	10.606	21.781
15093	13	21.434	11.992	15165	16	8.175	14.761	15237	15	19.698	16.272	15309	25	1.997	19.444	15381	22	11.125	21.089
15094	13	22.181	11.288	15166	10	8.340	14.528	15238*	46	20.650	16.781	15310	20	3.572	19.350	15382	16	11.456	21.949
15095	23	22.450	11.286	15167	22	8.878	14.480	15239	9	20.766	16.563	15311	12	3.744	19.512	15383	22	12.324	21.642
15096	9	23.798	11.754	15168	14	11.625	14.596	15240	8	22.321	16.180	15312	10	5.207	19.591	15384	16	12.646	21.120
15097*	68	25.102	11.826	15169	12	11.698	14.378	15241	13	23.520	16.190	15313	9	5.981	19.610	15385	38	13.068	21.975
15098	8	1.894	12.082	15170	28	11.910	14.874	15242	34	23.635	16.600	15314	35	6.487	19.964	16386	34	14.082	21.592
15099	32	1.978	12.792	15171	11	11.978	14.834	15243	11	24.932	16.646	15315	23	7.626	19.562	15387	30	15.152	21.864
15100	32	2.055	12.502	15172	10	12.323	14.416	15244	20	25.074	16.904	15316	22	9.127	19.342	15388	12	15.306	21.584
15101	36	2.200	12.209	15173	17	12.951	14.794	15245	28	25.510	16.143	15317	18	9.374	19.694	15389	24	16.400	21.589
15102	33	2.591	12.430	15174	16	13.526	14.676	15246	16	0.448	17.946	15318	22	14.497	19.434	15390	16	16.751	21.300
15103	18	2.664	12.570	15175	13	14.444	14.760	15247	42	0.878	17.910	15319	18	14.555	19.233	15391	26	18.834	21.673
15104	32	2.985	12.287	15176	20	14.570	14.670	15248*	72	1.984	17.274	15320	22	14.670	19.241	15392	8	20.900	21.780
15105	9	4.746	12.953	15177	21	14.668	14.686	15249	22	2.074	17.610	15321	26	14.822	19.600	15393	20	21.630	21.628
15106	20	8.054	12.680	15178	40	15.060	14.815	15250	8	3.054	17.648	15322*	40	15.631	19.665	15394	16	23.605	21.696
15107	26	9.130	12.620	15179	14	15.836	14.518	15251	35	3.297	17.316	15323	10	15.668	19.904	15395	37	25.332	21.335
15108	36	9.821	12.873	15180	16	16.583	14.849	15252	12	6.066	17.496	15324	21	15.972	19.012	15396	29	2.276	22.372
15109	25	11.058	12.676	15181	37	16.650	14.211	15253	10	6.071	17.466	15325	19	16.046	19.908	15397	10	3.889	22.760
15110	12	11.470	12.808	15182	17	17.029	14.642	15254	35	6.460	17.738	15326	22	16.059	19.334	15398	14	5.283	22.472
15111	10	12.545	12.088	15183	39	17.629	14.246	15255	15	6.564	17.052	15327	41	16.222	19.268	15399	25	9.880	22.318
15112*	54	12.705	12.467	15184	10	18.710	14.526	15256	23	6.588	17.074	15328	13	16.250	19.855	15400	10	10.356	22.110
15113	21	13.620	12.732	15185	14	18.740	14.150	15257	33	6.834	17.408	15329	10	16.570	19.668	15401*	41	11.299	22.654
15114	8	13.714	12.683	15186	20	19.376	14.874	15258	10	9.600	17.156	15330	15	16.958	19.672	15402	16	12.031	22.154
15115	13	15.164	12.916	15187	13	19.458	14.436	15259	30	9.642	17.420	15331*	40	17.018	19.164	15403	32	13.515	22.873
15116	10	16.650	12.734	15188	30	20.340	14.474	15260	11	11.754	17.718	15332	8	17.801	19.986	15404	13	14.286</	



15415	10	21.775	22.154	R.A. 6 <sup>h</sup> 44 <sup>m</sup> Plate 932; 1916 Dec. 21. Provisional Constants. A B C -02580 -00171 +2122 D E F +00154 -02602 -2740 Mag.=17.0-1.09√-d				15556	16	13.257	2.844	15628	27	13.394	5.834	15700	8	12.872	8.407
15416	12	23.173	22.234					15557	9	13.643	2.110	15629	34	14.564	5.950	15701	32	13.052	8.608
15417	32	24.458	22.445					15558	17	15.476	2.858	15630	13	15.960	5.031	15702	13	13.326	8.323
15418	15	1.387	23.400					15559	10	17.613	2.634	15631	10	16.009	5.550	15703	9	13.395	8.851
15419	22	1.844	23.154	No. d x y 15501 10 0.422 0.832 15502* 50 2.634 0.867 15503 14 3.653 0.004 15504 11 3.778 0.362 15505 24 4.031 0.578 15506 8 4.284 0.056 15507 9 4.434 0.619 15508 26 5.350 0.882 15509 12 7.264 0.150 15510 38 7.725 0.324 15511 13 9.189 0.160 15512* 42 9.312 0.330 15513 24 11.086 0.606 15514 10 11.228 0.847 15515 26 12.004 0.004 15516 31 14.089 0.018 15517 11 14.510 0.432 15518 12 17.428 0.470 15519 9 18.010 0.044 15520 34 18.678 0.955 15521 18 19.330 0.604 15522 11 23.618 0.160 15523 21 25.083 0.197 15524 13 2.506 1.226 15525 9 6.022 1.817 15526 31 10.178 1.726 15527 13 10.852 1.758 15528 29 10.898 1.192 15529 11 12.186 1.558 15530 32 13.544 1.380 15531 9 13.593 1.005 15532 14 15.685 1.368 15533 8 17.321 1.659 15534 14 17.963 1.254 15535 11 18.920 1.612 15536 31 19.083 1.993 15537 23 20.593 1.782 15538 18 21.916 1.698 15539 29 23.302 1.954 15540 17 23.917 1.916 15541 13 24.038 1.269 15542 40 24.558 1.631 15543* 46 2.952 2.259 15544 11 3.394 2.402 15545 11 3.483 2.131 15546 8 3.744 2.248 15547* 74 3.885 2.647 15548 9 4.442 2.831 15549 14 4.514 2.465 15550 29 7.160 2.410 15551* 26 7.775 2.382 15552 40 9.737 2.494 15553 10 10.408 2.669 15554 51 10.414 2.010 15555 9 12.775 2.987				15560	39	19.442	2.897	15632	9	17.132	5.008	15704	29	14.826	8.040
15420	10	5.130	23.880					15561	10	21.235	2.258	15633	33	17.604	5.324	15705	12	15.378	8.344
15421	10	5.700	23.382					15562	31	22.102	2.957	15634	31	18.968	5.684	15706	18	15.439	8.678
15422	16	5.846	23.044					15563	8	0.026	3.016	15635	8	19.676	5.931	15707	29	15.559	8.930
15423	24	7.106	23.591					15564	25	0.054	3.290	15636	20	24.752	5.800	15708	13	16.221	8.042
15424*	38	7.822	23.310					15565	14	0.127	3.569	15637	14	25.144	5.334	15709	11	16.470	8.071
15425	27	8.860	23.867					15566	10	0.615	3.939	15638	9	25.528	5.356	15710	9	17.851	8.237
15426	8	9.621	23.288					15567	10	1.437	3.528	15639	10	0.328	6.368	15711	13	18.663	8.366
15427	12	9.683	23.990					15568	11	2.018	3.149	15640	36	0.534	6.308	15712	41	19.024	8.831
15428	32	10.048	23.666					15569	13	2.832	3.646	15641	9	0.710	6.460	15713	19	19.053	8.726
15429	11	10.170	23.978					15570	20	3.078	3.581	15642	9	2.565	6.598	15714	14	19.388	8.500
15430	35	10.735	23.000					15571	11	4.096	3.949	15643*	80	3.053	6.196	15715	12	20.178	8.302
15431	8	12.354	23.164					15572	10	9.667	3.432	15644	24	4.204	6.746	15716	19	20.282	8.236
15432	24	12.470	23.134					15573	15	11.247	3.727	15645	10	5.622	6.028	15717	30	20.858	8.486
15433	12	12.755	23.860					15574	13	11.250	3.992	15646	30	7.345	6.698	15718	18	21.858	8.162
15434*	39	13.533	23.897					15575	21	12.456	3.320	15647*	50	7.620	6.804	15719	28	23.096	8.482
15435	11	15.207	23.383					15576	19	15.266	3.371	15648	14	7.866	6.162	15720	18	0.272	9.897
15436	17	15.685	23.134					15577*	40	15.273	3.141	15649	8	8.963	6.125	15721	28	0.274	9.754
15437	31	18.158	23.812					15578	12	15.953	3.782	15650	14	10.816	6.889	15722	19	3.928	9.882
15438	11	18.850	23.554					15579	9	16.812	3.061	15651	16	12.510	6.774	15723	24	7.289	9.806
15439	38	19.922	23.037					15580	28	17.288	3.205	15652	29	16.964	6.110	15724	8	9.349	9.326
15440	32	21.660	23.238					15581	28	17.718	3.383	15653	35	17.250	6.879	15725	9	12.588	9.118
15441	22	23.344	23.802					15582	15	18.032	3.575	15654*	45	17.718	6.640	15726	9	12.674	9.818
15442	9	23.763	23.012					15583	25	18.154	3.914	15655*	51	18.298	6.696	15727	8	12.742	9.888
15443	13	2.086	24.521					15584	11	18.600	3.267	15656	21	18.663	6.262	15728	19	13.478	9.546
15444	29	2.851	24.754					15585	14	19.192	3.732	15657	10	20.574	6.097	15729	12	16.566	9.260
15445	10	6.104	24.266					15586	9	19.688	3.023	15658	11	21.448	6.881	15730	25	17.518	9.094
15446	23	6.559	24.964					15587	25	19.930	3.532	15659*	41	23.088	6.828	15731	10	17.888	9.172
15447	16	7.666	24.250					15588	8	24.192	3.573	15660	28	23.117	6.924	15732	19	18.110	9.984
15448	33	10.802	24.142					15589*	60	1.168	4.219	15661	17	23.509	6.562	15733	19	18.942	9.598
15449	27	12.532	24.988					15589	32	2.134	4.184	15662*	46	24.747	6.936	15734	19	18.944	9.275
15450	10	12.578	24.162					15590	9	3.386	4.374	15663	13	24.818	6.679	15735	14	20.302	9.979
15451	13	13.070	24.864					15591	16	7.001	4.062	15664	9	1.146	7.018	15736	20	21.298	9.270
15452	26	15.100	24.260					15592	8	7.806	4.046	15665	28	2.100	7.925	15737	28	21.480	9.476
15453*	45	18.571	24.000					15593	13	8.436	4.248	15666	10	2.858	7.338	15738	26	24.360	9.026
15454	43	20.536	24.737					15594	12	8.567	4.079	15667	10	6.413	7.270	15739	13	0.600	10.418
15455	26	21.533	24.903					15595	10	10.134	4.683	15668*	53	7.554	7.124	15740	13	1.171	10.380
15456	9	22.586	24.248					15596	14	11.044	4.833	15669	25	11.361	7.472	15741	8	1.262	10.882
15457	22	23.657	24.472					15597	10	13.047	4.302	15670	19	13.218	7.354	15742	33	1.540	10.718
15458	22	24.072	24.719					15598	12	13.092	4.374	15671	33	13.510	7.358	15743	34	2.468	10.640
15459	12	24.092	24.726					15599	9	13.950	4.987	15672	45	13.670	7.362	15744	35	2.582	10.634
15460	14	24.294	24.740					15600	13	14.204	4.634	15673	27	14.789	7.206	15745	11	3.841	10.656
15461	34	25.146	24.828					15601	11	15.128	4.090	15674	13	15.648	7.646	15746	10	4.146	10.952
15462	16	25.742	24.128					15602	65	15.316	4.795	15675	8	18.620	7.780	15747	10	4.525	10.988
15463	9	25.781	24.686					15603*	55	15.476	4.258	15676	9	19.037	7.024	15748	16	4.948	10.794
15464	17	25.944	24.994					15604*	18	17.286	4.818	15677	17	20.968	7.407	15749	20	5.212	10.330
15465	42	2.812	25.900					15605	30	17.703	4.785	15678	23	21.335	7.017	15750	18	5.472	10.474
15466	11	2.900	25.684					15606	13	18.279	4.312	15679	34	21.520	7.425	15751	25	5.934	10.174
15467	17	4.544	25.532					15607	25	18.725	4.778	15680	10	23.292	7.432	15752	12	8.108	10.448
15468	25	5.204	25.054					15608	26	19.234	4.540	15681	22	23.947	7.132	15753	16	8.398	10.322
15469	25	5.430	25.690					15609	51	19.324	4.224	15682	13	0.007	8.685	15754	12	8.986	10.626
15470	30	6.236	25.826					15610*	50	20.374	4.442	15683	15	0.017	8.143	15755	8	9.474	10.830
15471	21	8.778	25.008	15611*	8	21.823	4.464	15684	8	0.064	8.420	15756	13	10.220	10.057				
15472	12	9.736	25.398	15612	30	22.623	4.700	15685	10	0.797	8.556	15757	26	10.416	10.150				
15473	10	9.886	25.821	15613	8	22.842	4.770	15686	21	1.126	8.494	15758	8	11.426	10.958				
15474	10	10.350	25.014	15614	16	23.727	4.568	15687	11	1.722	8.181	15759	32	12.864	10.466				
15475	14	10.550	25.494	15615	10	24.044	4.446	15688	12	2.386	8.621	15760	10	13.608	10.447				
15476	27	10.926																	



15772	35	22-924	10-528	15844	25	7-624	13-462	15916	38	7-596	15-880	15988	39	7-593	17-930	16060	12	4-372	19-506
15773	17	23-134	10-894	15845*	40	7-654	13-462	15917	11	8-006	15-498	15989	9	7-717	17-820	16061	14	4-987	19-684
15774	12	24-213	10-697	15846	9	7-750	13-590	15918	17	8-186	15-495	15990	20	8-210	17-749	16062	19	6-935	19-881
15775	13	25-078	10-749	15847	8	8-550	13-744	15919*	39	8-652	15-498	15991	12	8-376	17-758	16063	21	7-614	19-949
15776	39	25-736	10-216	15848	16	8-674	13-923	15920	9	9-049	15-837	15992	21	8-424	17-471	16064	13	8-413	19-707
15777	8	25-914	10-390	15849	8	8-683	13-541	15921	37	9-597	15-780	15993	17	8-766	17-102	16065	11	8-434	19-909
15778	16	0-176	11-328	15850	17	9-474	13-763	15922	9	10-568	15-601	15994	15	9-456	17-412	16066	17	8-625	19-044
15779	11	1-528	11-786	15851	10	9-746	13-414	15923	23	12-402	15-800	15995	26	10-553	17-552	16067	19	8-666	19-437
15780*	81	2-822	11-851	15852*	36	10-458	13-090	15924	18	12-946	15-600	15996	44	10-711	17-168	16068	32	8-706	19-522
15781	15	4-008	11-609	15853	8	11-614	13-991	15925	16	15-194	15-874	15997	39	10-914	17-564	16069	15	9-110	19-512
15782	29	4-083	11-543	15854	35	11-772	13-956	15926	10	15-813	15-335	15998	13	10-951	17-046	16070	21	10-088	19-706
15783*	41	4-695	11-844	15855	13	11-954	13-182	15927	14	16-214	15-433	15999	18	11-038	17-583	16071	10	10-348	19-794
15784	10	8-692	11-546	15856	10	12-581	13-366	15928	9	16-336	15-695	16000	10	11-583	17-388	16072	19	10-524	19-693
15785	9	9-136	11-612	15857	12	12-732	13-024	15929*	54	16-608	15-596	16001	21	11-786	17-214	16073	27	10-651	19-839
15786	35	9-607	11-324	15858	13	12-973	13-974	15930	11	16-719	15-962	16002	8	12-200	17-310	16074	33	10-962	19-578
15787	9	10-794	11-245	15859	23	13-203	13-617	15931	9	17-588	15-237	16003	14	12-281	17-686	16075	16	11-368	19-037
15788	19	11-292	11-374	15860	22	16-808	13-153	15932	8	17-958	15-094	16004	12	12-324	17-439	16076	13	12-488	19-482
15789	24	11-442	11-662	15861	12	17-300	13-117	15933	9	17-996	15-094	16005	9	12-553	17-134	16077	13	12-754	19-622
15790	19	11-454	11-660	15862	29	18-360	13-848	15934*	30	18-118	15-010	16006*	52	13-584	17-636	16078	39	12-809	19-354
15791	10	11-804	11-985	15863	29	18-892	13-969	15935	21	18-146	15-972	16007	21	13-619	17-502	16079	11	12-906	19-811
15792	9	14-670	11-169	15864	8	19-574	13-496	15936	8	18-976	15-405	16008	19	14-336	17-867	16080	14	13-491	19-409
15793	11	15-138	11-540	15865	12	22-134	13-090	15937	41	20-182	15-390	16009	8	15-360	17-674	16081	13	13-722	19-057
15794	16	15-548	11-740	15866	12	22-339	13-810	15938	8	20-586	15-107	16010	12	15-800	17-341	16082	10	14-336	19-796
15795	15	15-994	11-712	15867	20	23-616	13-828	15939	15	21-144	15-667	16011	12	16-238	17-958	16083	21	14-556	19-166
15796	14	16-516	11-884	15868	10	25-523	13-687	15940	18	21-507	15-568	16012	12	17-172	17-734	16084	32	14-820	19-090
15797	29	16-538	11-318	15869	10	0-083	14-564	15941	9	22-020	15-202	16013	17	17-367	17-897	16085	18	15-952	19-142
15798	16	16-972	11-296	15870	13	1-456	14-206	15942	13	22-810	15-688	16014	9	17-720	17-300	16086	23	17-076	19-124
15799	11	17-086	11-529	15871	19	1-729	14-650	15943	25	22-890	15-638	16015	20	17-771	17-120	16087	8	17-106	19-634
15800	9	17-404	11-206	15872	27	2-230	14-120	15944	9	22-980	15-666	16016*	44	18-052	17-854	16088	27	19-122	19-022
15801	9	17-843	11-942	15873	22	2-528	14-214	15945	8	23-620	15-288	16017*	61	20-233	17-940	16089	10	19-728	19-924
15802	11	19-341	11-342	15874	11	3-266	14-733	15946	13	24-518	15-264	16018	8	20-388	17-288	16090	24	21-530	19-568
15803	12	19-819	11-558	15875	10	3-978	14-222	15947	16	25-534	15-726	16019	12	20-862	17-082	16091*	42	21-830	19-121
15804*	77	20-513	11-228	15876	23	5-330	14-512	15948	10	1-274	16-222	16020	9	23-914	17-597	16092	8	22-258	19-382
15805	10	22-366	11-506	15877	10	6-589	14-751	15949	32	1-393	16-633	16021	11	24-452	17-758	16093	15	23-582	19-074
15806	14	24-436	11-666	15878	9	7-076	14-455	15950	11	2-693	16-672	16022	16	0-025	18-068	16094	14	0-774	20-358
15807	39	24-550	11-882	15879	11	7-193	14-027	15951	21	2-836	16-928	16023	11	1-508	18-102	16095	15	3-296	20-778
15808	13	24-785	11-174	15880	30	10-022	14-718	15952	26	3-268	16-166	16024	10	1-586	18-518	16096	9	3-346	20-780
15809	10	24-947	11-847	15881	10	10-806	14-970	15953	9	5-042	16-430	16025	15	2-191	18-188	16097	32	3-873	20-190
15810	13	2-292	12-580	15882	12	11-950	14-814	15954	16	6-798	16-123	16026*	76	2-312	18-950	16098	11	4-342	20-358
15811	8	2-890	12-311	15883	14	12-494	14-484	15955	8	7-652	16-238	16027	9	3-054	18-894	16099	13	4-828	20-440
15812*	44	2-948	12-453	15884	18	13-075	14-303	15956	13	7-689	16-094	16028	11	6-475	18-752	16100	24	5-706	20-256
15813	14	3-356	12-190	15885	15	13-411	14-820	15957	31	8-745	16-525	16029	13	7-137	18-283	16101	52	6-937	20-543
15814	16	4-233	12-788	15886	13	13-482	14-832	15958	11	10-112	16-388	16030	22	8-547	18-745	16102	39	7-896	20-837
15815	11	5-575	12-753	15887	13	14-354	14-948	15959	10	10-226	16-180	16031*	48	9-374	18-628	16103	10	9-569	20-600
15816	11	7-071	12-962	15888	12	14-384	14-301	15960	12	11-568	16-252	16032	12	9-910	18-620	16104	11	10-052	20-678
15817*	41	7-953	12-316	15889	11	14-476	14-974	15961	8	12-029	16-294	16033	8	10-212	18-082	16105	12	10-818	20-268
15818	12	9-262	12-551	15890	11	14-973	14-134	15962	8	12-383	16-970	16034	10	10-426	18-910	16106	11	11-024	20-602
15819*	48	12-068	12-702	15891*	49	16-928	14-182	15963	20	12-612	16-937	16035	14	10-542	18-243	16107	10	11-570	20-746
15820	13	12-088	12-864	15892	16	17-182	14-680	15964	8	13-833	16-956	16036	9	10-884	18-283	16108	10	11-787	20-400
15821	10	12-094	12-100	15893	28	17-444	14-130	15965	11	14-678	16-825	16037	13	11-730	18-838	16109	13	13-198	20-278
15822*	41	12-295	12-674	15894	12	17-670	14-624	15966	11	15-230	16-413	16038	12	12-615	18-064	16110	42	14-172	20-702
15823	32	13-288	12-778	15895*	35	17-906	14-882	15967	9	16-044	16-197	16039	29	13-557	18-302	16111	29	16-209	20-582
15824	8	13-568	12-558	15896	36	19-814	14-628	15968	11	16-318	16-900	16040	8	13-574	18-760	16112	12	16-395	20-965
15825	24	14-772	12-074	15897	10	21-212	14-157	15969	18	17-080	16-338	16041	21	14-139	18-058	16113	20	18-618	20-412
15826	29	16-450	12-440	15898	10	21-270	14-121	15970	29	18-171	16-165	16042	13	14-440	18-650	16114	31	19-968	20-240
15827	43	17-157	12-200	15899	17	22-152	14-446	15971	27	19-072	16-648	16043	10	17-198	18-801	16115	14	19-988	20-826
15828	9	18-532	12-482	15900*	56	22-737	14-128	15972	12	19-844	16-738	16044	14	17-611	18-428	16116	9	20-133	20-342
15829	19	19-264	12-812	15901	12	22-840	14-052	15973	8	19-900	16-410	16045	41	19-088	18-280	16117	9	20-160	20-899
15830	10	20-026	12-780	15902	15	23-594	14-002	15974	8	21-494	16-244	16046	19	19-688	18-734	16118	42	20-822	20-606
15831	30	20-528	12-428	15903	12	0-319	15-466	15975	20	21-773	16-254	16047	9	20-686	18-950	16119	33	20-882	20-179
15832	26	20-703	12-038	15904	9	0-918	15-893	15976	8	21-954	16-410	16048	13	20-689	18-260	16120	14	22-743	20-266
15833	31	21-971	12-994	15905	19	1-770	15-939	15977	10	22-962	16-178	16049	9	20-692	18-492	16121	8	23-426</	



				R.A. 6 <sup>h</sup> 52 <sup>m</sup>							
				Plate 933; 1916 Dec. 21.							
				Provisional Constants.							
				A B C							
				-0.02558 -0.00163 +0.2433							
				D E F							
				+0.00158 -0.02586 -0.3657							
				Mag. = 18.9 - 1.09 $\sqrt{d}$							
				No.	d	x	y				
16132	13	9.535	21.657	16204	13	2.110	24.770	16356	10	11.017	2.709
16133	32	9.972	21.206	16205	35	2.963	24.852	16357	12	12.038	2.208
16134	17	10.810	21.120	16206	15	3.556	24.150	16358	21	12.719	2.704
16135	36	11.716	21.608	16207	9	3.598	24.706	16359	16	12.872	2.665
16136	42	12.022	21.800	16208	14	3.891	24.882	16360	15	13.017	2.329
16137	9	12.228	21.538	16209	16	5.787	24.182	16361	17	13.115	2.372
16138	38	12.898	21.958	16210	32	6.598	24.162	16362	22	16.774	2.260
16139	11	13.407	21.674	16211	10	7.967	24.470	16363	43	17.904	2.903
16140	22	14.070	21.190	16212	46	8.115	24.152	16364	10	20.950	2.650
16141	25	14.552	21.088	16213	29	8.536	24.905	16365	50	21.240	2.038
16142	15	15.562	21.142	16214	8	8.930	24.322	16366	11	23.240	2.394
16143	14	17.322	21.114	16215	39	9.019	24.532	16367	13	24.834	2.766
16144	12	17.530	21.202	16216	11	9.694	24.993	16368*	70	24.862	2.579
16145	9	17.707	21.580	16217	9	10.230	24.641	16369	14	25.210	2.362
16146	17	18.572	21.990	16218	20	10.588	24.362	16370	24	6.420	3.682
16147	11	21.621	21.728	16219	13	11.450	24.812	16371	11	6.532	3.831
16148	15	23.004	21.782	16220	34	11.778	24.314	16372	60	7.090	3.691
16149	20	23.716	21.354	16221	9	12.956	24.738	16373	79	7.510	3.880
16150	10	25.199	21.040	16222	26	13.105	24.316	16374	11	9.448	3.757
16151	9	0.626	22.684	16223	14	13.278	24.134	16375	9	9.670	3.070
16152	9	0.972	22.270	16224	31	15.259	24.701	16376	39	11.167	3.066
16153	26	2.258	22.472	16225	37	16.380	24.663	16377	21	11.720	3.921
16154	8	4.415	22.153	16226	19	16.386	24.602	16378	15	11.744	3.023
16155	10	6.194	22.143	16227	18	16.446	24.319	16379	10	12.098	3.305
16156	25	7.197	22.678	16228*	41	16.974	24.644	16380	19	12.671	3.461
16157	11	7.726	22.716	16229	26	17.292	24.487	16381	17	13.651	3.939
16158	14	7.814	22.890	16230	33	17.740	24.886	16382	12	14.340	3.835
16159	8	9.526	22.163	16231	10	19.600	24.458	16383	10	14.704	3.742
16160	17	10.062	22.643	16232	12	19.782	24.070	16384	18	15.150	3.876
16161	15	10.161	22.210	16233	24	20.375	24.883	16385	70	15.699	3.203
16162	20	10.206	22.758	16234	13	21.318	24.556	16386	62	15.735	3.175
16163	10	10.402	22.570	16235	11	21.354	24.921	16387	22	17.991	3.551
16164	21	11.944	22.590	16236	28	23.412	24.376	16388	49	18.868	3.429
16165*	64	12.802	22.972	16237	9	24.952	24.325	16389	72	19.732	3.675
16166	36	12.825	22.336	16238	45	25.414	24.206	16390	15	20.683	3.500
16167	13	13.398	22.162	16239	8	0.857	25.060	16391	23	22.744	3.147
16168	10	15.948	22.150	16240	19	3.762	25.013	16392	14	23.215	3.394
16169	9	16.268	22.414	16241	10	3.775	25.124	16393	14	23.544	3.849
16170	10	18.857	22.776	16242	14	4.956	25.592	16394	38	0.450	4.593
16171	9	20.112	22.337	16243	53	5.386	25.430	16395	20	1.558	4.447
16172*	32	22.278	22.756	16244	12	6.138	25.138	16396	12	1.869	4.326
16173	14	23.154	22.648	16245	10	6.154	25.018	16397	62	3.544	4.396
16174	20	25.656	22.267	16246	12	6.782	25.632	16398	13	3.668	4.915
16175	15	1.152	23.838	16247	10	6.926	25.818	16399	22	3.968	4.010
16176	8	1.566	23.042	16248	8	7.459	25.244	16400*	105	4.838	4.413
16177	8	2.532	23.474	16249	14	8.320	25.510	16401	11	4.922	4.205
16178	31	4.722	23.430	16250	9	8.518	25.523	16402	11	5.082	4.146
16179	10	5.076	23.802	16251	36	8.668	25.372	16403	11	7.260	4.174
16180	16	5.430	23.548	16252	11	10.388	25.574	16404	20	7.320	4.026
16181	14	5.718	23.494	16253	9	12.554	25.615	16405	25	8.279	4.580
16182	8	5.824	23.887	16254	36	12.802	25.576	16406	10	10.298	4.318
16183	9	6.580	23.954	16255	12	12.904	25.032	16407*	91	11.356	4.509
16184	8	8.522	23.805	16256	9	13.344	25.082	16408	51	12.320	4.542
16185	8	11.160	23.210	16257	16	13.771	25.180	16409	18	13.230	4.181
16186	15	11.410	23.834	16258	18	14.336	25.438	16410	10	13.573	4.543
16187	14	12.436	23.617	16259	18	14.913	25.133	16411	26	13.839	4.581
16188	44	12.984	23.993	16260	20	16.158	25.382	16412	13	14.030	4.970
16189	9	13.320	23.840	16261	20	17.942	25.038	16413	17	16.170	4.644
16190	25	13.498	23.174	16262	13	18.384	25.811	16414	11	16.320	4.794
16191	16	13.580	23.443	16263	10	19.310	25.375	16415	22	16.766	4.600
16192	39	13.593	23.871	16264	12	19.543	25.471	16416	14	17.086	4.990
16193	10	14.921	23.671	16265	24	19.942	25.280	16417	40	17.619	4.954
16194	16	16.229	23.072	16266	16	20.174	25.918	16418	17	19.116	4.557
16195	32	16.305	23.148	16267	18	20.308	25.347	16419	10	19.278	4.504
16196	32	17.729	23.836	16268	33	21.100	25.880	16420	31	19.816	4.446
16197	53	17.982	23.049	16269	39	21.690	25.934	16421	46	20.390	4.514
16198	18	19.903	23.146	16270	15	21.757	25.344	16422	29	22.590	4.054
16199	8	21.631	23.033	16271	14	22.094	25.630	16423	10	24.283	4.795
16200	10	24.710	23.725	16272	17	23.886	25.608	16424	23	2.592	5.670
16201	8	0.400	24.284	16273	15	24.358	25.149	16425	26	2.980	5.196
16202	17	1.472	24.505					16426	10	3.111	5.771
16203	18	1.888	24.750					16427	12	3.368	5.216



16500	11	10.369	7.803	16572	14	18.453	9.450	16644	14	12.120	11.814	16716	14	3.452	13.550	16788	21	21.118	14.823
16501	14	13.236	7.620	16573	11	18.640	9.393	16645*	60	12.180	11.986	16717	10	3.457	13.119	16789	11	21.332	14.340
16502	10	13.374	7.954	16574	12	18.700	9.502	16646	15	12.424	11.690	16718	12	4.440	13.156	16790	16	22.521	14.639
16503	9	13.440	7.026	16575	20	20.325	9.494	16647	15	13.353	11.472	16719	13	4.670	13.700	16791	10	23.290	14.788
16504	9	13.779	7.574	16576*	76	21.410	9.189	16648	22	14.724	11.296	16720	36	6.190	13.708	16792	11	23.578	14.322
16505	16	14.242	7.713	16577	37	21.592	9.400	16649	10	14.830	11.501	16721	15	6.969	13.173	16793	12	24.350	14.822
16506	15	14.860	7.693	16578	10	22.180	9.915	16650	11	15.260	11.284	16722	10	7.083	13.854	16794	21	24.400	14.443
16507	40	15.233	7.712	16579	48	23.316	9.554	16651	14	16.125	11.938	16723	22	7.330	13.700	16795	14	0.762	15.580
16508	19	15.564	7.996	16580	10	23.594	9.576	16652	12	16.564	11.600	16724	12	7.548	13.730	16796	30	0.840	15.529
16509	18	15.642	7.998	16581	9	24.862	9.710	16653	17	17.300	11.908	16725	13	8.256	13.537	16797	11	0.930	15.554
16510	27	15.784	7.757	16582	12	0.692	10.634	16654	12	18.478	11.158	16726*	56	8.338	13.967	16798	10	1.174	15.134
16511	10	16.204	7.056	16583	46	0.815	10.420	16655	11	19.180	11.384	16727	23	9.010	13.291	16799	11	1.570	15.170
16512	12	16.872	7.579	16584	15	1.029	10.782	16656	17	19.511	11.812	16728	19	9.035	13.641	16800	16	2.390	15.880
16513	12	16.950	7.038	16585	16	2.106	10.570	16657	11	20.275	11.366	16729	44	10.775	13.665	16801	15	2.464	15.138
16514	11	17.692	7.008	16586	11	2.180	10.191	16658	10	20.668	11.564	16730	13	10.950	13.014	16802	25	3.486	15.586
16515	12	19.212	7.825	16587	23	2.973	10.615	16659	39	21.925	11.684	16731	10	11.378	13.918	16803	17	4.108	15.317
16516	56	19.270	7.136	16588	54	3.624	10.077	16660	12	22.124	11.142	16732	12	11.498	13.324	16804*	86	4.674	15.390
16517	13	21.667	7.434	16589*	78	3.924	10.928	16661	38	22.717	11.334	16733	13	13.550	13.889	16805	46	7.070	15.064
16518	20	21.689	7.064	16590*	133	4.548	10.121	16662	17	22.759	11.499	16734	12	14.122	13.160	16806	15	7.328	15.166
16519	10	21.814	7.700	16591	10	5.850	10.841	16663	26	23.032	11.963	16735	31	14.320	13.864	16807	20	7.910	15.379
16520	55	25.516	7.066	16592	12	6.890	10.437	16664	26	23.052	11.920	16736	12	14.361	13.024	16808	12	8.298	15.412
16521	34	0.961	8.370	16593	10	7.622	10.934	16665	11	23.282	11.794	16737	16	15.256	13.678	16809	11	9.037	15.633
16522	43	2.236	8.900	16594	13	7.998	10.682	16666	28	23.646	11.652	16738	12	16.057	13.907	16810	11	9.260	15.492
16523*	74	4.565	8.160	16595	46	8.115	10.976	16667	13	23.810	11.320	16739	10	16.874	13.416	16811	11	9.776	15.299
16524	10	4.633	8.950	16596	12	10.254	10.412	16668	39	23.883	11.208	16740	12	17.248	13.264	16812	13	10.046	15.878
16525	10	5.662	8.470	16597	10	11.570	10.107	16669	11	24.570	11.225	16741	13	17.570	13.276	16813	54	11.018	15.186
16526	48	6.418	8.960	16598	11	12.178	10.170	16670	19	25.990	11.176	16742	10	17.925	13.483	16814	12	11.070	15.342
16527	13	7.618	8.450	16599	17	13.582	10.820	16671	10	0.052	12.988	16743	14	18.110	13.140	16815	54	12.336	15.141
16528	13	8.258	8.632	16600	12	15.228	10.964	16672	20	0.852	12.116	16744	21	18.257	13.128	16816	55	12.543	15.766
16529	10	9.389	8.914	16601	14	15.280	10.150	16673	11	1.533	12.504	16745	9	18.838	13.648	16817	10	13.940	15.556
16530	17	10.758	8.578	16602	12	16.526	10.515	16674	11	2.574	12.958	16746	11	19.906	13.284	16818	11	13.950	15.598
16531	14	10.898	8.050	16603	13	17.061	10.890	16675	11	2.890	12.202	16747	25	20.206	13.915	16819	14	14.578	15.712
16532	14	11.534	8.741	16604	10	17.415	10.661	16676	10	4.106	12.584	16748	10	20.326	13.644	16820	10	14.582	15.351
16533	11	12.702	8.476	16605	10	17.970	10.640	16677	11	4.200	12.062	16749	10	20.528	13.175	16821*	104	14.731	15.009
16534	11	13.458	8.887	16606	34	18.068	10.892	16678	11	4.756	12.916	16750	25	20.630	13.157	16822	11	15.008	15.976
16535	12	14.144	8.788	16607	10	18.165	10.644	16679	32	5.116	12.656	16751	9	20.756	13.134	16823	56	15.011	15.584
16536	22	16.102	8.560	16608	10	18.432	10.938	16680	13	5.480	12.012	16752	10	22.138	13.060	16824	19	15.194	15.367
16537	16	16.275	8.460	16609	11	19.358	10.322	16681	12	6.235	12.146	16753	60	24.374	13.438	16825	20	15.960	15.397
16538	42	18.150	8.466	16610	27	20.511	10.440	16682	30	6.802	12.704	16754	27	24.491	13.892	16826	9	15.990	15.632
16539	11	18.465	8.204	16611	16	20.620	10.604	16683	12	7.667	12.524	16755	20	25.191	13.596	16827	59	16.257	15.159
16540	12	19.131	8.538	16612	17	21.380	10.091	16684	25	7.800	12.742	16756	19	25.306	13.574	16828	10	16.700	15.060
16541	45	19.276	8.578	16613	36	21.390	10.640	16685	33	8.626	12.162	16757	21	0.088	14.346	16829	12	17.580	15.547
16542	54	19.288	8.120	16614	49	21.597	10.389	16686	10	9.956	12.601	16758*	78	0.663	14.020	16830	62	17.703	15.171
16543	14	19.855	8.318	16615	50	21.912	10.303	16687	12	10.480	12.243	16759*	80	3.963	14.744	16831	10	19.183	15.789
16544	23	19.892	8.532	16616	11	22.348	10.358	16688	52	11.430	12.000	16760	46	5.040	14.826	16832	11	19.419	15.304
16545	46	20.658	8.666	16617	22	24.060	10.161	16689	26	11.430	12.663	16761	10	5.464	14.408	16833	18	19.662	15.306
16546	10	21.182	8.856	16618	58	24.712	10.662	16690	14	13.328	12.795	16762	28	5.769	14.932	16834*	80	19.750	15.580
16547	13	21.634	8.762	16619	17	25.115	10.894	16691	11	14.110	12.630	16763	32	7.070	14.889	16835	25	20.064	15.546
16548	45	23.106	8.256	16620	42	25.124	10.316	16692	13	14.472	12.944	16764	35	7.398	14.324	16836	55	20.082	15.550
16549	22	25.620	8.536	16621	9	0.269	11.408	16693	13	15.314	12.554	16765	16	7.906	14.910	16837	52	20.217	15.118
16550	10	25.794	8.192	16622	26	2.340	11.538	16694	14	17.328	12.790	16766	13	8.128	14.324	16838	14	20.278	15.749
16551	13	4.779	9.216	16623	11	2.375	11.606	16695	30	18.456	12.250	16767	13	8.192	14.340	16839	11	20.494	15.701
16552	15	7.150	9.268	16624	55	2.456	11.754	16696	10	18.600	12.505	16768	10	9.052	14.909	16840	12	21.314	15.392
16553	13	8.157	9.878	16625	19	2.685	11.043	16697	17	18.666	12.018	16769	14	9.148	14.419	16841	28	21.406	15.424
16554	10	9.320	9.510	16626	13	2.858	11.716	16698	22	18.823	12.240	16770	15	10.270	14.422	16842	12	21.796	15.978
16555	10	9.544	9.862	16627*	139	4.434	11.284	16699	55	18.905	12.615	16771	28	10.320	14.078	16843	17	22.314	15.824
16556	10	9.688	9.108	16628	11	4.942	11.720	16700	11	18.908	12.244	16772	9	10.588	14.468	16844	15	22.951	15.890
16557	10	10.950	9.768	16629	14	5.080	11.660	16701	20	19.236	12.040	16773	39	11.290	14.937	16845	120	25.324	15.942
16558	50	11.190	9.968	16630	10	6.214	11.818	16702	29	19.248	12.546	16774	13	11.734	14.480	16846	11	0.919	16.068
16559	20	11.664	9.470	16631	11	6.410	11.960	16703	10	19.388	12.621	16775	51	12.715	14.478	16847	12	1.348	16.350
16560	10	12.451	9.548	16632	11	6.614	11.076	16704	10	21.526	12.430	16776	12	13.321	14.401	16848	13	1.719	16.906
16561	15	12.700	9.891	16633	25	6.838	11.870	16705	14	22.096	12.458	16777	15	13.639	14.551	16849	16	2.526	16.710
16562																			



16860	10	8.571	16.518	16932	13	2.652	18.018	17004	15	7.340	20.101	17076	10	11.932	22.564	17148	22	12.230	24.514
16861	20	9.716	16.473	16933	10	2.978	18.122	17005	16	7.500	20.552	17077	55	12.786	22.320	17149	27	12.764	24.582
16862	13	10.260	16.784	16934	59	3.340	18.414	17006	13	7.828	20.082	17078	16	12.840	22.015	17150	33	13.430	24.696
16863	13	10.660	16.352	16935	24	4.132	18.420	17007	70	8.160	20.332	17079	11	12.880	22.358	17151*	82	14.390	24.050
16864	28	11.390	16.540	16936	11	4.570	18.014	17008	31	8.410	20.385	17080	9	13.064	22.965	17152	22	16.304	24.012
16865	10	11.807	16.213	16937	11	5.947	18.185	17009	20	8.968	20.932	17081	15	13.717	22.619	17153	17	17.002	24.110
16866	11	13.280	16.240	16938	20	7.860	18.865	17010	11	9.542	20.572	17082	14	13.976	22.408	17154	53	17.222	24.924
16867	12	14.277	16.046	16939	69	8.115	18.810	17011	15	9.934	20.612	17083*	82	14.034	22.150	17155	24	18.236	24.543
16868	12	14.850	16.483	16940	11	8.636	18.665	17012	10	10.698	20.700	17084	12	14.125	22.194	17156	15	18.269	24.264
16869	11	15.258	16.562	16941	56	8.890	18.076	17013	11	11.530	20.564	17085	10	14.447	22.242	17157	45	18.494	24.648
16870	14	15.946	16.330	16942	14	9.004	18.472	17014	10	11.632	20.274	17086	20	17.787	22.437	17158	9	18.921	24.757
16871	25	16.420	16.398	16943	25	11.510	18.314	17015	15	11.635	20.494	17087	13	18.656	22.710	17159	13	22.015	24.502
16872	13	16.496	16.322	16944	10	12.964	18.254	17016	21	11.980	20.705	17088	43	18.893	22.205	17160	11	22.108	24.293
16873	16	16.515	16.298	16945	25	13.796	18.190	17017	25	12.702	20.834	17089	13	20.153	22.795	17161	25	22.492	24.722
16874	21	17.147	16.250	16946	13	13.812	18.502	17018	14	12.783	20.910	17090	10	21.130	22.336	17162	11	23.304	24.944
16875	56	17.182	16.800	16947	13	14.028	18.760	17019	20	12.838	20.633	17091*	46	21.982	22.990	17163*	160	23.339	24.308
16876	17	17.940	16.372	16948	20	16.540	18.278	17020	13	13.298	20.742	17092*	89	23.875	22.822	17164	13	0.164	25.529
16877	55	18.096	16.100	16949	31	16.942	18.454	17021	10	13.528	20.212	17093	11	24.102	22.396	17165	26	1.954	25.487
16878	25	18.540	16.067	16950	11	17.081	18.484	17022	29	14.071	20.906	17094	10	24.430	22.206	17166	22	2.420	25.020
16879	11	18.590	16.815	16951	36	18.781	18.516	17023	14	14.480	20.610	17095	28	25.740	22.974	17167	25	3.092	25.962
16880	9	19.848	16.194	16952	15	19.894	18.084	17024	19	14.938	20.330	17096	11	1.305	23.500	17168	175	5.244	25.220
16881	10	19.944	16.747	16953	23	20.080	18.928	17025	27	15.240	20.005	17097	14	2.758	23.594	17169	21	6.894	25.131
16882	11	20.124	16.920	16954	11	20.200	18.876	17026	27	16.054	20.874	17098	26	4.135	23.758	17170	10	7.164	25.676
16883	9	21.650	16.080	16955	25	22.260	18.332	17027	37	16.265	20.316	17099	11	4.488	23.686	17171	19	7.380	25.796
16884	10	22.169	16.728	16956	14	22.652	18.502	17028	32	16.269	20.267	17100	20	4.685	23.342	17172	17	7.886	25.484
16885	12	24.342	16.402	16957	18	22.655	18.638	17029	12	16.872	20.900	17101	30	4.937	23.178	17173	45	8.420	25.082
16886	11	25.845	16.228	16958	19	23.048	18.769	17030	32	17.790	20.209	17102	29	7.647	23.344	17174	33	9.008	25.024
16887	11	1.885	17.472	16959	16	23.646	18.050	17031	47	18.300	20.874	17103	27	7.980	23.094	17175	25	11.419	25.480
16888	21	2.428	17.631	16960	10	24.010	18.504	17032	27	19.561	20.756	17104	13	8.560	23.754	17176	60	12.544	25.618
16889*	96	4.418	17.750	16961	24	25.040	18.380	17033	34	19.804	20.270	17105	10	9.509	23.621	17177	19	12.700	25.812
16890	16	4.538	17.840	16962	13	3.460	19.265	17034	25	20.360	20.106	17106	14	10.782	23.164	17178	12	13.064	25.091
16891	14	7.468	17.898	19663	39	4.020	19.677	17035	16	20.400	20.268	17107	21	12.301	23.000	17179	35	13.876	25.760
16892	11	7.500	17.410	16964	16	4.762	19.750	17036	12	20.930	20.950	17108	39	12.360	23.425	17180	37	14.406	25.864
16893	18	7.544	17.100	16965	12	4.784	19.765	17037	10	23.226	20.675	17109*	84	12.572	23.128	17181	51	15.450	25.954
16894	51	7.913	17.420	16966*	76	5.238	19.658	17038*	105	23.635	20.120	17110	35	12.675	23.628	17182	34	15.588	25.256
16895*	55	9.130	17.381	16967	11	5.345	19.050	17039	53	24.531	20.034	17111	12	12.826	23.893	17183	10	15.898	25.996
16896	11	9.169	17.612	16968	11	5.817	19.530	17040	29	25.690	20.344	17112	14	13.100	23.002	17184	14	16.210	25.368
16897	13	9.198	17.040	16969	16	5.980	19.318	17041	20	1.026	21.670	17113	60	13.462	23.912	17185	53	18.308	25.258
16898	22	9.714	17.876	16970	9	6.015	19.111	17042	23	1.734	21.236	17114	14	14.125	23.830	17186	44	18.507	25.228
16899	20	10.108	17.776	16971	11	6.610	19.256	17043	12	2.860	21.066	17115	13	16.222	23.382	17187	11	20.928	25.688
16900	14	10.113	17.620	16972	10	6.935	19.867	17044	26	4.355	21.702	17116*	80	17.849	23.764	17188	12	22.530	25.816
16901	12	11.150	17.787	16973	27	9.114	19.077	17045	17	4.922	21.996	17117	41	17.986	23.355	17189	15	24.816	25.770
16902	25	12.393	17.418	16974	30	9.546	19.974	17046	73	5.725	21.700	17118	62	18.570	23.734				
16903	13	12.471	17.629	16975	15	10.468	19.697	17047	13	7.329	21.062	17119*	82	18.755	23.591				
16904	20	12.670	17.250	16976	49	10.662	19.900	17048	54	8.134	21.984	17120	30	19.460	23.874				
16905	52	12.740	17.874	16977*	78	11.586	19.724	17049	12	8.562	21.630	17121*	56	19.576	23.502				
16906	19	13.050	17.898	16978	19	12.210	19.828	17050	51	8.704	21.624	17122	18	19.862	23.530				
16907	17	13.164	17.562	16979	12	12.316	19.548	17051	47	8.857	21.427	17123*	80	19.876	23.799				
16908	26	13.679	17.788	16980	26	13.858	19.267	17052	17	11.779	21.470	17124	13	20.100	23.301				
16909	31	14.240	17.756	16981	52	14.150	19.675	17053	11	15.520	21.285	17125	73	20.950	23.195				
16910	16	15.835	17.652	16982*	80	14.604	19.130	17054	45	15.687	21.113	17126	12	21.522	23.422				
16911	13	15.930	17.344	16983	36	14.692	19.813	17055	11	16.272	21.165	17127	11	21.586	23.632				
16912	25	16.042	17.712	16984	35	14.914	19.661	17056	53	16.608	21.640	17128	17	22.604	23.505				
16913	47	16.253	17.302	16985	10	15.530	19.279	17057	28	16.813	21.896	17129	12	25.812	23.244				
16914	29	16.400	17.769	16986	39	15.610	19.555	17058	11	17.226	21.626	17130	31	1.468	24.264				
16915	11	17.450	17.654	16987	32	16.798	19.967	17059	30	17.458	21.137	17131	10	2.206	24.926				
16916	18	18.500	17.312	16988	10	17.354	19.496	17060	18	19.522	21.756	17132	12	3.002	24.193				
16917	12	18.836	17.378	16989	12	17.665	19.440	17061	10	19.600	21.099	17133	70	3.465	24.068				
16918	16	18.900	17.982	16990	57	19.030	19.110	17062	24	19.924	21.065	17134	21	4.650	24.436				
16919	12	19.539	17.737	16991	12	19.090	19.464	17063	10	23.678	21.140	17135	10	4.958	24.430				
16920	11	19.822	17.590	16992	49	19.134	19.184	17064	42	23.697	21.455	17136	10	5.824	24.850				
16921	18	20.085	17.270	16993	26	20.865	19.966	17065	24	24.457	21.384	17137	22	6.823	24.708				
16922	11	20.607	17.129	16994	43	20.960	19.179	17066	15	24.502	21.526	17138	18	7.340	24.816				
16923	11	21.683	17.647	16995	18	21.189	19.248	17067*	89	24.628	21.472	17139	11	7.706	24.620				
16924	29	21.730																	



17207	19	6.910	0.664	17279	10	24.474	2.650	17351	33	0.832	5.555	17423	39	3.348	7.234	17495	14	17.426	8.614
17208	23	9.188	0.446	17280*	60	24.910	2.033	17352	8	1.938	5.463	17424	32	4.654	7.824	17496	23	17.626	8.727
17209	9	9.470	0.118	17281	16	24.926	2.083	17353	18	2.365	5.806	17425	8	5.954	7.914	17497	20	17.800	8.019
17210	21	10.437	0.469	17282	25	0.504	3.366	17354	31	4.524	5.702	17426	9	6.147	7.231	17498	11	17.958	8.066
17211	31	10.983	0.806	17283	13	0.976	3.605	17355	26	6.088	5.411	17427	8	7.422	7.434	17499	9	18.055	8.670
17212	8	13.364	0.694	17284	11	2.726	3.136	17356	26	7.448	5.788	17428	25	8.060	7.606	17500	19	18.726	8.163
17213	13	13.648	0.988	17285	9	4.102	3.835	17357	13	7.551	5.620	17429	22	9.644	7.955	17501	13	19.143	8.052
17214	22	14.358	0.324	17286	39	4.695	3.466	17358	27	8.406	5.346	17430	10	9.886	7.134	17502	10	19.708	8.259
17215	38	15.045	0.220	17287	38	4.764	3.034	17359	12	9.064	5.968	17431	11	9.975	7.455	17503	14	21.148	8.485
17216	33	18.469	0.223	17288	36	5.380	3.835	17360	28	9.610	5.760	17432	29	11.351	7.219	17504	8	21.822	8.206
17217	10	18.551	0.998	17289	24	5.586	3.738	17361	33	10.073	5.644	17433	14	11.507	7.141	17505	12	22.155	8.777
17218	33	18.635	0.353	17290*	43	6.180	3.100	17362	10	10.540	5.075	17434	42	11.628	7.098	17506	11	23.175	8.414
17219	10	18.938	0.331	17291	10	7.624	3.470	17363	37	10.578	5.592	17435	14	12.585	7.390	17507	16	23.270	8.950
17220	21	20.574	0.328	17292	28	7.894	3.238	17364	13	12.490	5.382	17436	8	12.933	7.755	17508	41	24.196	8.446
17221	23	21.492	0.297	17293	10	7.902	3.210	17365	30	12.764	5.714	17437	33	14.036	7.585	17509	9	24.704	8.562
17222	32	22.146	0.908	17294*	76	8.946	3.029	17366	24	13.065	5.405	17438	10	15.076	7.633	17510	10	25.461	8.454
17223	8	23.244	0.466	17295	24	9.136	3.214	17367	46	13.265	5.782	17439	29	15.157	7.540	17511	37	1.199	9.764
17224	21	23.428	0.352	17296	13	9.269	3.188	17368	32	13.456	5.832	17440	10	15.594	7.916	17512	11	1.478	9.780
17225	19	23.800	0.419	17297	17	9.700	3.808	17369	15	14.335	5.141	17441	31	15.705	7.075	17513	10	2.746	9.888
17226	14	0.566	1.632	17298	20	10.104	3.321	17370	10	14.512	5.534	17442	31	16.341	7.754	17514	11	3.267	9.658
17227	8	1.132	1.302	17299	30	11.926	3.668	17371	10	14.848	5.084	17443*	44	16.876	7.344	17515	24	4.162	9.440
17228	8	2.042	1.954	17300	24	12.726	3.053	17372	23	15.104	5.526	17444*	53	16.954	7.420	17516	27	5.446	9.884
17229	27	3.364	1.155	17301	16	13.142	3.147	17373	15	16.212	5.896	17445	13	17.246	7.909	17517	9	6.284	9.766
17230	24	3.968	1.906	17302	34	13.614	3.486	17374	10	16.419	5.410	17446*	51	17.638	7.274	17518	10	6.490	9.722
17231	24	5.225	1.684	17303	36	15.077	3.622	17375	14	17.044	5.516	17447	11	17.686	7.154	17519	10	6.684	9.952
17232	9	5.879	1.842	17304	15	15.393	3.780	17376	8	17.185	5.322	17448	8	18.567	7.790	17520	23	7.034	9.576
17233	28	6.044	1.400	17305	23	15.455	3.271	17377	10	17.320	5.837	17449	34	19.514	7.296	17521	26	7.140	9.245
17234	29	10.372	1.870	17306	37	17.678	3.766	17378	43	18.955	5.284	17450	26	19.555	7.650	17522	10	7.285	9.604
17235	15	10.996	1.125	17307	29	18.486	3.428	17379	26	19.232	5.434	17451	12	19.702	7.592	17523	16	8.140	9.516
17236	14	11.034	1.012	17308	28	19.821	3.612	17380	12	19.394	5.466	17452	22	20.825	7.802	17524	20	8.410	9.833
17237	8	11.085	1.411	17309	14	23.078	3.845	17381	26	20.231	5.920	17453	12	21.702	7.256	17525	11	9.000	9.082
17238	10	11.820	1.210	17310	15	23.419	3.370	17382	18	20.726	5.598	17454*	62	23.246	7.968	17526	8	9.166	9.994
17239*	48	13.086	1.680	17311	32	24.526	3.370	17383	13	21.186	5.029	17455	10	23.319	7.380	17527	13	9.874	9.882
17240	20	13.703	1.568	17312	12	25.343	3.344	17384	35	22.061	5.876	17456	13	23.702	7.240	17528	24	10.196	9.074
17241	13	14.249	1.423	17313	37	25.984	3.289	17385	28	22.080	5.590	17457	21	24.268	7.312	17529	20	10.462	9.214
17242	22	16.018	1.054	17314	27	0.366	4.282	17386*	54	24.166	5.932	17458	32	24.818	7.528	17530	39	11.475	9.496
17243	10	16.382	1.736	17315	22	1.314	4.058	17387	23	24.448	5.792	17459	32	24.927	7.018	17531	26	11.888	9.603
17244	27	18.554	1.670	17316	11	2.074	4.985	17388	11	24.584	5.616	17460	44	24.939	7.362	17532	30	12.394	9.510
17245	13	21.054	1.773	17317	47	3.950	4.146	17389	45	25.400	5.054	17461	11	25.124	7.766	17533	12	14.123	9.931
17246*	75	25.324	1.010	17318	21	4.520	4.211	17390	17	1.834	6.946	17462	37	0.964	8.470	17534	10	14.442	9.338
17247	22	25.978	1.290	17319	8	4.690	4.134	17391	25	2.324	6.587	17463	10	1.980	8.060	17535	22	15.870	9.012
17248	10	1.648	2.393	17320	26	6.522	4.054	17392	41	4.050	6.461	17464	26	3.486	8.701	17536	8	16.712	9.115
17249	23	2.588	2.946	17321	9	7.832	4.316	17393	11	4.878	6.090	17465	10	3.653	8.359	17537	25	19.590	9.580
17250*	43	2.606	2.762	17322	18	8.818	4.883	17394	15	5.858	6.682	17466	14	4.771	8.032	17538	33	19.616	9.766
17251	8	3.724	2.290	17323	17	12.215	4.755	17395	10	6.026	6.486	17467	21	5.041	8.188	17539*	41	20.166	9.957
17252*	41	4.120	2.689	17324	9	14.146	4.642	17396	14	6.084	6.165	17468	46	5.648	8.280	17540	21	20.568	9.522
17253	8	4.622	2.738	17325	29	14.492	4.676	17397	41	6.397	6.408	17469	41	5.849	8.648	17541	22	20.724	9.494
17254	21	6.864	2.703	17326	36	14.980	4.644	17398	28	6.436	6.343	17470	8	5.912	8.516	17542	16	21.380	9.432
17255	9	6.885	2.691	17327	31	15.856	4.783	17399	24	6.525	6.552	17471	8	5.940	8.824	17543	13	22.513	9.160
17256	13	7.580	2.344	17328	23	16.548	4.233	17400	34	6.628	6.500	17472	30	8.175	8.175	17544	12	24.200	9.009
17257	48	8.190	2.998	17329*	49	16.554	4.996	17401	19	6.888	6.769	17473	30	8.708	8.564	17545	10	0.245	10.586
17258	15	9.234	2.197	17330	28	16.685	4.380	17402	26	12.041	6.326	17474	32	9.456	8.070	17546	29	1.954	10.356
17259	8	9.386	2.457	17331	10	16.698	4.300	17403	42	12.498	6.698	17475	22	9.620	8.616	17547	40	2.614	10.846
17260	31	10.156	2.734	17332	10	17.228	4.412	17404	14	13.218	6.925	17476	10	9.788	8.255	17548	34	3.020	10.492
17261	29	10.274	2.557	17333	18	17.588	4.024	17405	14	14.028	6.486	17477	10	9.844	8.260	17549	12	3.445	10.960
17262	10	11.051	2.754	17334	11	17.910	4.928	17406	12	14.159	6.403	17478	10	9.978	8.500	17550	10	3.744	10.614
17263	25	11.400	2.264	17335	23	18.128	4.300	17407	12	15.494	6.408	17479	44	10.164	8.954	17551	10	4.200	10.090
17264	28	12.044	2.834	17336	22	18.189	4.510	17408	16	15.824	6.820	17480	10	10.196	8.805	17552	11	4.810	10.519
17265	11	13.085	2.872	17337	15	19.244	4.340	17409	9	15.855	6.144	17481	34	10.410	8.008	17553	28	6.565	10.956
17266	24	14.877	2.142	17338	13	19.445	4.673	17410	10	16.004	6.135	17482	13	10.440	8.336	17554	28	7.577	10.996
17267	22	16.394	2.197	17339	41	19.966	4.052	17411	21	16.338	6.851	17483	11	10.488	8.257	17555	33	7.622	10.406
17268	38	16.458	2.150	17340	20	20.119	4.390	17412	40	16.625	6.844	17484	19	11.185	8.528	17556	31	7.936	10.489
17269	28	18.648	2.093	17341	10	20.179	4.426	17413	10	16.720	6.936	17485	15	11.744	8.321	17557	10	8.259	10.324
17270	26	18.794	2.512	17342	9	21.358	4.726	17414	10</										



17567	21	12.336	10.717	17639	24	0.964	12.178	17711	20	10.168	13.452	17783	33	5.482	15.030	17855	13	23.234	16.541
17568	16	12.631	10.373	17640	20	0.984	12.134	17712	16	10.180	13.248	17784	11	6.452	15.126	17856	10	23.883	16.226
17569	8	12.846	10.274	17641	10	1.208	12.003	17713*	35	10.380	13.276	17785	17	6.993	15.304	17857	29	24.354	16.466
17570	10	13.156	10.902	17642	24	2.175	12.373	17714	30	10.652	13.304	17786	27	8.248	15.504	17858	37	24.376	16.094
17571	15	13.326	10.602	17643	28	3.451	12.170	17715	14	12.306	13.608	17787	20	8.726	15.934	17859	11	24.912	16.399
17572	8	13.521	10.382	17644	8	4.567	12.320	17716*	44	12.698	13.716	17788	11	8.970	15.788	17860*	44	25.154	16.926
17573	40	13.970	10.450	17645	28	4.620	12.630	17717	10	12.800	13.579	17789	10	9.050	15.665	17861	46	25.662	16.559
17574	9	16.037	10.046	17646	10	5.162	12.809	17718	30	12.966	13.234	17790	23	9.099	15.348	17862	10	0.843	17.794
17575	13	16.482	10.738	17647	24	6.752	12.360	17719	32	13.409	13.411	17791	27	9.578	15.935	17863	14	2.224	17.794
17576*	44	16.663	10.086	17648	27	7.012	12.694	17720	9	13.744	13.315	17792	34	10.580	15.696	17864	10	2.755	17.924
17577	29	17.084	10.799	17649	11	7.100	12.270	17721	31	14.432	13.355	17793	18	10.714	15.904	17865	38	4.580	17.100
17578	11	17.245	10.732	17650	10	7.186	12.796	17722	8	14.862	13.322	17794	22	11.584	15.994	17866*	46	5.408	17.880
17579	14	17.796	10.026	17651	20	8.035	12.279	17723	21	17.374	13.554	17795	30	13.590	15.514	17867	14	5.889	17.864
17580	21	17.833	10.224	17652	11	8.255	12.592	17724	10	18.080	13.249	17796	22	14.176	15.609	17868	29	5.964	17.460
17581	24	18.994	10.554	17653*	44	8.360	12.680	17725	26	18.257	13.927	17797	25	14.458	15.482	17869	24	7.344	17.450
17582	12	19.546	10.996	17654	24	8.441	12.212	17726	14	18.381	13.550	17798	27	14.466	15.761	17870	17	7.566	17.227
17583	27	19.768	10.384	17655	12	8.574	12.439	17727	10	18.904	13.084	17799	30	15.444	15.916	17871	34	8.750	17.086
17584	32	20.053	10.328	17656	10	8.580	12.078	17728	13	20.084	13.892	17800	10	16.404	15.230	17872	10	8.824	17.808
17585	8	20.443	10.982	17657	31	9.600	12.140	17729	29	20.980	13.772	17801*	45	16.420	15.457	17873	24	8.975	17.902
17586	10	21.200	10.061	17658	10	10.988	12.498	17730	10	21.014	13.326	17802	10	16.819	15.980	17874	30	10.276	17.490
17587	19	22.139	10.024	17659	36	11.534	12.274	17731	8	21.166	13.960	17803	24	17.092	15.596	17875	15	11.566	17.378
17588	8	22.517	10.523	17660	9	11.614	12.064	17732	28	24.006	13.236	17804	12	18.194	15.576	17876*	46	12.556	17.106
17589	26	23.630	10.352	17661	19	11.682	12.014	17733	18	24.256	13.393	17805	19	18.612	15.118	17877	21	12.961	17.270
17590*	45	23.866	10.856	17662	21	12.024	12.988	17734	33	24.532	13.636	17806	26	18.706	15.338	17878	15	13.100	17.165
17591	22	23.877	10.952	17663	12	12.182	12.900	17735	13	25.330	13.882	17807	39	19.034	15.097	17879	10	13.443	17.339
17592	31	25.280	10.276	17664	16	12.398	12.402	17736	12	25.380	13.780	17808	10	20.791	15.920	17880	9	13.504	17.352
17593	31	0.634	11.554	17665	13	12.694	12.342	17737	16	0.504	14.865	17809	34	22.116	15.714	17881	19	13.896	17.597
17594	10	0.678	11.718	17666	10	12.700	12.334	17738	11	1.276	14.996	17810	18	22.361	15.390	17882	26	13.964	17.557
17595	8	0.912	11.654	17667	12	13.354	12.683	17739	9	1.370	14.549	17811	10	22.438	15.772	17883	30	14.334	17.156
17596	28	1.568	11.857	17668	10	13.574	12.545	17740	12	1.554	14.526	17812	32	22.810	15.636	17884	26	15.251	17.326
17597	11	1.724	11.522	17669*	47	13.980	12.428	17741	23	2.380	14.630	17813	24	23.380	15.432	17885	26	16.276	17.179
17598	34	1.796	11.406	17670	8	14.080	12.452	17742	29	2.456	14.080	17814	11	23.914	15.280	17886	18	16.456	17.090
17599	10	2.484	11.410	17671	37	14.494	12.759	17743	8	3.364	14.288	17815	28	25.094	15.284	17887	15	17.730	17.897
17600	22	3.022	11.070	17672	29	15.398	12.824	17744	10	4.644	14.484	17816	14	25.178	15.732	17888	12	17.878	17.518
17601	10	3.394	11.926	17673	33	16.086	12.374	17745	33	5.397	14.170	17817	15	25.612	15.004	17889	11	18.120	17.112
17602	11	3.450	11.470	17674	24	16.645	12.064	17746	31	6.427	14.152	17818	10	0.192	16.954	17890	32	18.284	17.170
17603	12	3.762	11.100	17675	8	17.251	12.784	17747	12	7.855	14.981	17819	12	0.316	16.050	17891	12	18.530	17.196
17604	21	3.900	11.335	17676	24	17.622	12.070	17748	31	8.326	14.714	17820	17	0.958	16.107	17892	13	18.631	17.688
17605	29	4.782	11.284	17677	10	18.414	12.233	17749	13	8.696	14.480	17821	12	2.360	16.592	17893	8	19.361	17.974
17606	10	4.904	11.002	17678*	52	18.576	12.096	17750*	43	9.524	14.434	17822	80	3.320	16.112	17894	15	19.436	17.673
17607	39	5.120	11.512	17679	10	18.885	12.862	17751	10	10.180	14.461	17823	23	3.858	16.386	17895	23	21.345	17.697
17608	11	6.034	11.704	17680	14	19.350	12.854	17752	32	10.542	14.876	17824	25	4.568	16.950	17896	11	21.450	17.749
17609	29	6.564	11.374	17681	11	19.432	12.258	17753	8	11.120	14.165	17825	19	6.378	16.092	17897	10	22.428	17.660
17610	23	7.020	11.026	17682	12	19.740	12.469	17754	34	11.522	14.716	17826	35	7.573	16.164	17898	12	22.730	17.300
17611	21	7.678	11.850	17683	29	19.808	12.098	17755	22	12.364	14.854	17827	16	9.484	16.011	17899	10	22.804	17.165
17612	12	7.708	11.360	17684	14	20.676	12.064	17756	23	12.524	14.500	17828	13	9.986	16.570	17900	38	23.415	17.935
17613	11	9.365	11.303	17685	10	20.874	12.574	17757	26	13.390	14.528	17829	14	10.226	16.810	17901	29	23.462	17.974
17614	29	10.002	11.764	17686	36	21.058	12.446	17758	14	14.333	14.372	17830	13	10.600	16.369	17902	25	23.766	17.588
17615	11	10.434	11.096	17687	9	21.977	12.830	17759	10	14.388	14.578	17831	32	10.750	16.501	17903	26	24.086	17.877
17616	15	10.483	11.005	17688	33	23.448	12.296	17760*	34	15.106	14.446	17832	17	12.192	16.306	17904	10	24.184	17.540
17617	26	10.728	11.482	17689	33	24.178	12.273	17761	10	15.150	14.102	17833	16	12.500	16.020	17905*	35	24.265	17.946
17618*	47	11.092	11.240	17690	14	24.418	12.392	17762	32	15.160	14.872	17834	22	12.794	16.774	17906	9	24.783	17.340
17619	26	12.009	11.907	17691	14	24.422	12.410	17763	31	15.294	14.454	17835	13	13.622	16.250	17907	10	24.854	17.222
17620	8	12.225	11.254	17692	33	0.170	13.170	17764	30	16.916	14.925	17836	24	14.520	16.786	17908	16	24.866	17.693
17621	16	12.274	11.532	17693	45	2.332	13.626	17765	10	16.950	14.050	17837	18	15.244	16.946	17909	13	25.320	17.358
17622	37	12.820	11.414	17694	12	2.451	13.093	17766	20	17.300	14.234	17838	23	15.975	16.846	17910	17	0.311	18.558
17623	24	12.936	11.482	17695	10	2.528	13.174	17767	23	17.410	14.356	17839	10	16.174	16.470	17911	14	0.708	18.725
17624	10	13.961	11.049	17696	23	3.151	13.769	17768	39	18.434	14.636	17840	10	16.183	16.638	17912	18	0.716	18.860
17625	10	14.011	11.984	17697	25	3.266	13.747	17769	12	18.668	14.494	17841	12	16.886	16.300	17913	8	0.850	18.985
17626	10	14.580	11.842	17698	25	4.100	13.398	17770	38	19.524	14.983	17842	13	17.008	16.858	17914	17	1.112	18.981
17627	12	14.607	11.450	17699	10	4.806	13.888	17771	35	20.100	14.836	17843	10	17.219	16.057	17915	14	1.695	18.250
17628	22	15.512	11.423	17700*	55	4.975	13.222	17772	21	20.230	14.500	17844	40	18.194	16.670</				



17927	8	9.834	18.374	17999	33	21.266	19.236	18071	22	12.244	21.438	18143	21	3.966	23.400	18215	31	24.686	24.146
17928	36	10.418	18.540	18000	24	22.386	19.194	18072	10	12.610	21.181	18144	14	4.747	23.723	18216	30	24.720	24.160
17929	35	10.840	18.516	18001	31	23.540	19.478	18073	10	13.140	21.590	18145	35	5.690	23.525	18217	43	25.762	24.556
17930	10	11.086	18.081	18002	13	24.040	19.619	18074	10	14.332	21.140	18146	12	6.339	23.324	18218	21	3.020	25.949
17931	31	11.984	18.149	18003	25	24.056	19.806	18075	18	14.346	21.110	18147	8	7.134	23.141	18219	21	4.260	25.135
17932	9	12.190	18.843	18004	11	1.330	20.888	18076	24	14.650	21.239	18148	32	7.887	23.766	18220	11	4.634	25.400
17933	12	12.692	18.442	18005*	70	1.715	20.321	18077*	47	14.798	21.987	18149*	42	8.700	23.828	18221	28	5.604	25.978
17934	25	13.360	18.692	18006	38	2.616	20.218	18078	15	14.832	21.980	18150	12	8.760	23.749	18222	32	5.934	25.774
17935	27	14.206	18.698	18007	28	3.784	20.506	18079	31	15.822	21.286	18151	12	9.865	23.352	18223	13	8.756	25.311
17936	28	15.214	18.289	18008	10	4.830	20.792	18080	10	16.215	21.596	18152	9	9.946	23.163	18224	10	9.746	25.238
17937	17	16.320	18.509	18009	27	6.126	20.464	18081	10	16.644	21.970	18153	42	10.478	23.426	18225	32	10.018	25.134
17938	11	16.486	18.570	18010	12	6.243	20.485	18082	12	17.616	21.196	18154	27	13.250	23.858	18226	25	11.222	25.524
17939*	56	16.661	18.390	18011	18	6.244	20.840	18083	10	18.924	21.820	18155	12	13.482	23.784	18227	31	12.381	25.056
17940	15	16.721	18.520	18012	8	6.302	20.524	18084	10	19.348	21.184	18156	18	15.712	23.124	18228	14	12.452	25.420
17941	21	17.448	18.916	18013	18	8.001	20.882	18085	14	19.551	21.754	18157	12	15.885	23.088	18229	32	15.774	25.232
17942	10	17.877	18.074	18014	31	9.234	20.588	18086	28	19.649	21.960	18158	11	16.204	23.052	18230	17	16.159	25.642
17943*	40	19.056	18.218	18015	31	9.346	20.121	18087	33	20.147	21.540	18159	33	16.218	23.210	18231	10	16.554	25.973
17944	41	19.070	18.414	18016	29	9.832	20.096	18088	14	20.238	21.154	18160	25	16.412	23.245	18232	34	18.584	25.662
17945*	45	19.581	18.290	18017	16	10.027	20.038	18089	23	21.160	21.460	18161	22	16.920	23.366	18233	13	18.622	25.590
17946	37	19.673	18.942	18018	14	10.170	20.503	18090*	44	25.314	21.364	18162	8	17.016	23.453	18234	10	18.686	25.444
17947	38	20.400	18.076	18019	13	10.496	20.260	18091	12	2.234	22.586	18163	12	18.630	23.898	18235	12	18.824	25.620
17948	34	20.986	18.216	18020	24	11.756	20.232	18092	12	2.563	22.392	18164	21	18.676	23.169	18236	10	18.983	25.037
17949	35	21.250	18.147	18021	20	11.910	20.013	18093	12	2.804	22.796	18165	9	18.740	23.174	18237	26	20.328	25.475
17950	12	21.800	18.860	18022	29	12.196	20.648	18094	24	5.139	22.704	18166	26	18.854	23.612	18238	33	20.704	25.847
17951	31	22.108	18.388	18023	12	12.330	20.752	18095	17	5.876	22.280	18167	40	19.282	23.696	18239	52	21.170	25.648
17952	36	22.208	18.226	18024	23	13.570	20.952	18096	10	6.056	22.955	18168	15	19.950	23.624	18240	14	23.846	25.660
17953	10	23.554	18.300	18025	13	13.858	20.560	18097	19	6.274	22.665	18169	13	21.912	23.248	18241	40	24.834	25.700
17954	15	23.850	18.381	18026	19	13.910	20.452	18098	20	6.360	22.570	18170	10	22.342	23.734				
17955	9	25.700	18.256	18027	12	14.166	20.922	18099	15	6.496	22.127	18171	18	22.750	23.330				
17956	32	0.820	19.958	18028*	50	14.710	20.178	18100	24	8.466	22.939	18172	22	23.228	23.330				
17957	20	1.612	19.436	18029*	52	15.523	20.682	18101	12	8.576	22.203	18173	29	24.161	23.358				
17958	11	3.605	19.310	18030	10	17.015	20.764	18102	12	9.133	22.494	18174	15	25.744	23.607				
17959	12	4.064	19.212	18031	18	17.267	20.650	18103	25	9.887	22.930	18175	14	0.194	24.736				
17960	17	5.184	19.305	18032	10	17.466	20.354	18104	27	10.025	22.498	18176	24	0.676	24.945				
17961	31	5.374	19.120	18033	23	17.910	20.000	18105	31	10.610	22.733	18177	103	1.497	24.515				
17962	20	5.981	19.666	18034	22	18.496	20.804	18106	10	10.831	22.101	18178	12	1.498	24.575				
17963	22	6.378	19.852	18035	19	18.772	20.886	18107	10	11.357	22.831	18179	10	1.781	24.668				
17964	31	6.880	19.334	18036	12	20.121	20.600	18108	13	11.596	22.808	18180	10	4.215	24.380				
17965	10	7.350	19.256	18037	33	20.417	20.537	18109	13	11.624	22.098	18181	28	4.290	24.624				
17966	28	8.107	19.732	18038	18	21.640	20.940	18110	17	12.375	22.550	18182	25	4.944	24.306				
17967*	67	8.167	19.812	18039	25	23.319	20.876	18111	25	12.496	22.950	18183	26	5.000	24.766				
17968	44	8.533	19.130	18040	22	23.432	20.077	18112	29	12.670	22.493	18184	19	7.100	24.856				
17969	10	8.580	19.454	18041	18	23.649	20.470	18113	27	12.820	22.977	18185	15	7.526	24.266				
17970	16	9.386	19.126	18042	29	23.664	20.642	18114	40	12.911	22.422	18186	12	8.383	24.861				
17971	10	9.930	19.430	18043	25	23.902	20.864	18115	21	13.580	22.900	18187	24	9.057	24.100				
17972	8	10.016	19.948	18044	21	24.561	20.771	18116	15	13.824	22.340	18188	41	9.502	24.061				
17973	12	10.688	19.600	18045	23	25.248	20.690	18117	21	14.284	22.470	18189	25	9.765	24.260				
17974	26	10.976	19.926	18046	10	1.789	21.340	18118	31	16.508	22.072	18190	10	9.877	24.998				
17975	17	11.222	19.500	18047	33	1.812	21.656	18119	21	16.734	22.418	18191	13	9.918	24.547				
17976	25	11.427	19.718	18048	25	2.573	21.568	18120	24	17.700	22.298	18192	33	11.334	24.778				
17977	15	11.676	19.854	18049	15	2.621	21.708	18121	11	17.889	22.286	18193	10	11.441	24.503				
17978	24	11.804	19.472	18050*	51	2.736	21.654	18122	12	19.006	22.793	18194	38	11.928	24.921				
17979	13	12.362	19.676	18051	10	5.020	21.648	18123	24	19.352	22.094	18195	16	11.948	24.650				
17980	36	12.738	19.250	18052	12	5.048	21.618	18124	20	20.000	22.906	18196	33	13.400	24.804				
17981	20	12.836	19.618	18053	11	7.086	21.277	18125	23	20.364	22.100	18197	26	13.446	24.425				
17982	10	13.466	19.997	18054	11	7.136	21.416	18126	10	20.389	22.576	18198	21	14.478	24.554				
17983	10	13.586	19.524	18055	28	7.680	21.156	18127	43	20.392	22.402	18199*	80	15.113	24.764				
17984	9	16.368	19.788	18056	13	7.754	21.030	18128	10	20.979	22.126	18200	12	15.118	24.510				
17985	10	16.941	19.354	18057	29	8.848	21.557	18129	15	21.813	22.386	18201	32	15.207	24.462				
17986	10	17.228	19.028	18058	13	8.955	21.542	18130	18	21.916	22.570	18202	12	15.344	24.654				
17987	9	17.286	19.438	18059	10	9.036	21.890	18131	29	22.006	22.426	18203	20	16.466	24.075				
17988	13	17.900	19.470	18060	10	9.101	21.040	18132	9	22.730	22.242	18204	43	17.314	24.190				
17989	10	18.335	19.602	18061	26	9.215	21.924	18133	14	23.540	22.708	18205	12	18.375	24.768				
17990	10	18.516	19.515	18062	35	9.320	21.964	18134	10	23.846	22.406	18206	29	18.572	24.213				
17991	32	18.547	19.526	18063	12	9.526	21.966	18135	9	23.887	22.458	18207	16	19.505	24.360				
17992	10	18.750	19.365	18064	30	10.120	21.860	18136	25	25.196	22.423	18208	20	19.938	24.563				
17993	20	18.956	19.24																



18272	31	21.773	0.087	18344	27	13.782	2.976	18416	45	24.457	3.907	18488	10	15.294	5.896	18560	9	9.554	7.394
18273	19	24.801	0.099	18345	11	14.800	2.337	18417	33	25.640	3.848	18489	12	15.890	5.262	18561	15	10.875	7.474
18274*	64	2.644	1.915	18346	12	15.128	2.251	18418	11	0.333	4.207	18490	23	16.866	5.013	18562	12	11.970	7.584
18275	16	2.668	1.962	18347	14	15.794	2.921	18419	20	1.278	4.736	18491	10	16.950	5.315	18563	10	12.277	7.826
18276	20	3.716	1.161	18348	10	17.128	2.953	18420	25	1.490	4.456	18492	17	18.154	5.812	18564	26	12.495	7.680
18277	14	3.835	1.408	18349	10	17.605	2.360	18421	15	1.700	4.615	18493	10	18.356	5.560	18565	12	12.734	7.730
18278	10	4.090	1.107	18350	13	18.256	2.899	18422	10	2.229	4.072	18494	11	19.323	5.831	18566	10	13.573	7.638
18279	16	4.730	1.590	18351	15	18.525	2.116	18423	44	3.164	4.931	18495	14	20.016	5.844	18567	16	14.310	7.864
18280	9	4.884	1.600	18352	10	18.890	2.681	18424	20	4.013	4.949	18496	14	20.057	5.956	18568	12	14.582	7.814
18281	41	5.166	1.625	18353	13	18.910	2.154	18425	11	4.634	4.788	18497	19	21.502	5.864	18569	21	15.064	7.110
18282	16	5.322	1.284	18354	10	20.074	2.443	18426	12	5.760	4.836	18498	11	22.318	5.904	18570	36	17.582	7.992
18283*	55	6.557	1.239	18355	10	20.110	2.309	18427	24	5.950	4.568	18499	11	22.710	5.478	18571*	41	17.656	7.010
18284	14	6.750	1.406	18356	16	20.890	2.079	18428	17	6.004	4.352	18500	9	22.840	5.890	18572	11	18.218	7.942
18285	11	7.044	1.017	18357	28	21.079	2.891	18429	8	6.500	4.516	18501	14	23.437	5.476	18573	10	18.386	7.510
18286	9	7.130	1.190	18358	14	21.196	2.860	18430	11	7.205	4.584	18502	15	23.615	5.779	18574	11	19.850	7.659
18287	13	7.718	1.176	18359	33	22.430	2.498	18431	17	7.528	4.456	18503	8	1.014	6.364	18575	11	20.012	7.400
18288	13	7.898	1.554	18360	8	22.670	2.624	18432	10	8.150	4.534	18504	12	1.936	6.464	18576	10	21.130	7.276
18289	10	9.636	1.886	18361	14	23.774	2.581	18433	12	9.230	4.406	18505	25	2.707	6.900	18577	17	21.710	7.322
18290	9	10.130	1.774	18362	12	24.302	2.640	18434	13	10.068	4.008	18506	10	4.032	6.264	18578*	37	21.988	7.736
18291	12	11.478	1.474	18363	24	24.370	2.686	18435	10	10.252	4.419	18507	12	5.507	6.685	18579	10	0.966	8.311
18292	9	11.644	1.491	18364	14	24.700	2.062	18436	17	10.664	4.051	18508	14	5.765	6.041	18580	14	1.062	8.842
18293	31	12.135	1.292	18365	31	24.706	2.123	18437	10	11.600	4.498	18509	14	6.126	6.645	18581	35	1.986	8.334
18294*	45	12.343	1.054	18366	13	0.833	3.738	18438	9	11.835	4.822	18510*	82	6.636	6.700	18582	12	1.997	8.898
18295	10	12.462	1.569	18367	13	1.176	3.264	18439	16	11.968	4.816	18511	11	6.752	6.116	18583	10	2.496	8.445
18296	9	12.889	1.220	18368	26	2.277	3.254	18440	21	12.059	4.623	18512	19	6.920	6.806	18584	12	3.250	8.334
18297	24	12.922	1.230	18369	10	2.670	3.333	18441*	49	12.171	4.244	18513	16	7.108	6.743	18585	19	3.910	8.854
18298	24	13.112	1.051	18370	14	2.935	3.898	18442	14	12.574	4.434	18514	9	7.828	6.463	18586	11	4.640	8.670
18299	8	13.135	1.052	18371	14	3.096	3.222	18443	15	14.135	4.856	18515	27	8.011	6.954	18587	11	5.629	8.216
18300	9	13.143	1.184	18372	44	3.737	3.159	18444	12	14.220	4.483	18516	13	8.138	6.320	18588	36	5.704	8.366
18301	12	14.346	1.468	18373	11	4.158	3.063	18445	19	14.325	4.685	18517	32	8.285	6.180	18589	20	5.913	8.089
18302	10	15.742	1.681	18374	13	5.858	3.829	18446	12	14.966	4.608	18518	10	8.785	6.216	18590	24	6.490	8.542
18303	10	15.754	1.149	18375	18	5.952	3.787	18447	16	15.663	4.438	18519	21	9.416	6.689	18591	11	6.558	8.278
18304	11	16.946	1.531	18376	13	5.989	3.711	18448	17	15.864	4.914	18520	12	9.550	6.420	18592*	36	7.768	8.765
18305	10	16.990	1.431	18377	14	6.509	3.901	18449	9	16.472	4.770	18521	14	9.960	6.234	18593	26	8.602	8.923
18306*	49	17.232	1.897	18378	15	6.820	3.197	18450	24	16.810	4.680	18522	28	10.494	6.883	18594	19	9.784	8.336
18307	20	17.346	1.835	18379	10	6.832	3.490	18451	13	17.294	4.724	18523	14	10.782	6.360	18595	18	9.910	8.719
18308	10	18.666	1.466	18380*	58	7.044	3.353	18452	10	17.384	4.104	18524	37	11.418	6.943	18596	10	9.974	8.080
18309	10	19.387	1.362	18381	10	7.060	3.903	18453	8	17.970	4.608	18525	19	11.870	6.821	18597	10	10.934	8.834
18310	12	19.886	1.058	18382	10	7.160	3.573	18454	15	18.256	4.510	18526	23	11.926	6.470	18598	13	11.425	8.621
18311	12	20.244	1.051	18383	13	7.646	3.378	18455	17	19.267	4.280	18527	10	12.320	6.993	18599	14	11.686	8.512
18312	26	20.818	1.990	18384	18	8.344	3.541	18456	14	20.904	4.518	18528	11	12.780	6.845	18600	10	12.766	8.277
18313	12	21.096	1.634	18385	29	8.500	3.050	18457	18	21.213	4.608	18529	18	13.015	6.747	18601	10	13.034	8.614
18314	11	21.620	1.630	18386	16	9.064	3.459	18458	16	21.690	4.909	18530	10	13.180	6.579	18602	20	13.200	8.427
18315	27	22.316	1.863	18387	10	10.338	3.606	18459	12	22.002	4.978	18531	17	14.054	6.700	18603	23	13.385	8.506
18316	12	23.062	1.284	18388	14	10.528	3.008	18460	18	22.964	4.014	18532*	30	16.069	6.935	18604	10	16.362	8.968
18317	14	23.309	1.876	18389	17	10.712	3.596	18461	10	24.014	4.976	18533	18	16.226	6.785	18605	10	16.430	8.412
18318	17	23.877	1.938	18390	22	10.929	3.032	18462	10	24.826	4.645	18534*	41	16.339	6.098	18606	10	16.554	8.164
18319	11	24.285	1.014	18391	30	11.204	3.461	18463	18	25.884	4.067	18535	10	16.362	6.790	18607	9	16.611	8.108
18320	11	0.810	2.581	18392	14	11.337	3.890	18464	10	0.336	5.808	18536	10	17.504	6.619	18608	33	16.860	8.872
18321	17	0.916	2.894	18393	27	11.840	3.585	18465*	58	1.927	5.822	18537	17	17.624	6.891	18609	18	17.373	8.704
18322	22	1.624	2.679	18394	13	12.644	3.492	18466	20	2.218	5.678	18538	14	19.470	6.243	18610	12	18.183	8.905
18323	12	2.221	2.533	18395	18	13.450	3.259	18467	14	2.349	5.498	18539	21	19.872	6.574	18611	11	18.262	8.014
18324	10	3.714	2.108	18396	19	14.006	3.862	18468	11	2.735	5.092	18540	14	20.493	6.480	18612	10	18.889	8.956
18325	11	3.762	2.989	18397	20	15.295	3.529	18469	10	3.910	5.408	18541	25	20.890	6.745	18613	14	18.999	8.844
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18327	8	4.200	2.386	18399	19	16.628	3.540	18471	13	6.114	5.640	18543	34	24.244	6.514	18615	20	21.564	8.950
18328	19	4.516	2.990	18400	14	16.667	3.801	18472	30	6.297	5.053	18544	10	0.769	7.344	18616*	45	21.870	8.864
18329	18	4.569	2.747	18401	13	17.032	3.638	18473	27	6.620	5.740	18545*	17	1.026	7.863	18617	25	21.883	8.944
18330	12	4.648	2.050	18402	15	17.033	3.612	18474	35	6.630	5.712	18546	42	1.483	7.130	18618	11	22.063	8.770
18331	40	7.635	2.364	18403	15	17.285	3.514	18475*	56	6.720	5.152	18547	17	2.049	7.198	18619*	40	22.540	8.239
18332	10	7.937	2.933	18404	40	17.622	3.902	18476	11	6.962	5.211	18548	25	2.601	7.410	18620	38	22.700	8.167
18333	10	8.023	2.334	18405	35	17.738	3.382	18477	13	7.700	5.856	18549	36	2.720	7.244	18621	10	23.367	8.938
18334	22	8.585	2.901	18406	18	17.908	3.455	18478	10	7.717	5.508	18550	10	2.772	7.966	18622	23	24.045	8.550
18335	12	8.700	2.190	18407*	67	18.226	3.614	18479	10										



18632	13	11-130	9-269	18704	11	20-822	10-536	18776	29	12-307	12-595	18848	10	21-860	13-235	18920	13	12-803	15-600
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18992	22	25.508	16.309	19064	15	11.547	18.258	19136	27	18.394	19.805	19208	12	23.886	20.292	19280	17	11.564	22.010
18993	8	0.292	17.560	19065	22	11.584	18.194	19137	13	20.148	19.725	19209	12	24.200	20.489	19281	19	12.088	22.820
18994	11	0.593	17.198	19066	9	11.730	18.480	19138	11	20.804	19.218	19210	13	24.660	20.566	19282	9	12.891	22.725
18995	10	0.668	17.068	19067	9	13.115	18.840	19139	25	21.460	19.580	19211	12	25.540	20.390	19283	15	13.304	22.020
18996	35	1.279	17.830	19068	10	13.227	18.349	19140	13	22.134	19.240	19212	42	25.742	20.444	19284	14	13.592	22.968
18997	24	1.329	17.868	19069	12	13.254	18.953	19141	10	22.536	19.540	19213*	45	3.208	21.246	19285	14	13.806	22.780
18998	19	1.630	17.482	19070	8	15.767	18.734	19142	13	22.867	19.450	19214	12	3.948	21.754	19286	14	14.550	22.863
18999	23	1.952	17.765	19071	11	16.088	18.625	19143	11	22.980	19.120	19215	15	5.624	21.531	19287	10	14.692	22.512
19000*	29	2.129	17.834	19072	16	16.694	18.334	19144	15	23.104	19.576	19216	12	6.050	21.538	19288	10	14.732	22.012
19001	10	2.645	17.224	19073	12	17.649	18.890	19145	15	23.344	19.148	19217	12	6.352	21.150	19289	21	15.390	22.231
19002	10	2.716	17.105	19074	10	17.660	18.176	19146	21	23.648	19.812	19218	19	6.906	21.040	19290	33	15.400	22.230
19003	17	2.732	17.576	19075	10	18.020	18.025	19147	10	24.212	19.799	19219	10	7.000	21.567	19291	10	15.864	22.516
19004	14	3.183	17.240	19076	21	19.609	18.869	19148	12	24.637	19.258	19220	16	7.287	21.278	19292	18	16.436	22.936
19005	36	4.578	17.070	19077	12	19.918	18.836	19149	10	25.074	19.196	19221	20	7.558	21.288	19293	20	16.450	22.940
19006	11	4.700	17.537	19078	10	21.071	18.308	19150	22	25.192	19.936	19222	32	7.782	21.060	19294	11	16.892	22.864
19007	13	5.003	17.305	19079	14	21.564	18.996	19151	14	25.280	19.885	19223	10	7.807	21.910	19295*	40	16.893	22.116
19008	12	5.644	17.721	19080	26	21.726	18.480	19152	19	1.208	20.772	19224*	36	10.472	21.098	19296*	35	17.452	22.406
19009	14	5.940	17.626	19081	10	22.157	18.264	19153	15	1.535	20.361	19225	11	10.864	21.618	19297	13	17.529	22.304
19010*	65	6.385	17.234	19082	9	22.264	18.325	19154	24	1.552	20.534	19226	13	11.290	21.680	19298	12	19.194	22.074
19011*	43	6.880	17.424	19083	22	22.464	18.942	19155	20	1.796	20.754	19227	32	11.436	21.334	19299	9	20.547	22.014
19012	15	7.100	17.647	19084	12	22.538	18.790	19156	17	2.452	20.656	19228	10	11.781	21.714	19300	12	20.702	22.894
19013	10	7.207	17.798	19085	13	22.972	18.030	19157	19	3.138	20.570	19229	16	11.873	21.380	19301	12	22.942	22.632
19014	20	7.929	17.643	19086	28	23.770	18.952	19158	22	4.700	20.864	19230	15	12.024	21.578	19302	14	23.016	22.362
19015	14	8.318	17.930	19087	13	24.176	18.772	19159	22	5.562	20.070	19231	11	12.330	21.280	19303	11	23.184	22.900
19016	16	8.520	17.085	19088	23	24.412	18.952	19160	18	6.078	20.017	19232	14	12.456	21.270	19304	19	24.225	22.452
19017	10	8.837	17.698	19089*	40	24.642	18.390	19161	12	6.239	20.740	19233	27	13.290	21.534	19305	13	24.382	22.781
19018	10	8.936	17.034	19090	16	25.627	18.052	19162	10	6.336	20.617	19234	32	13.323	21.746	19306	22	24.546	22.980
19019	14	10.406	17.500	19091	16	0.264	19.096	19163	26	6.634	20.527	19235	19	13.448	21.670	19307	19	24.842	22.606
19020	10	11.930	17.039	19092	10	0.646	19.384	19164	11	6.792	20.322	19236	32	14.179	21.527	19308	11	25.046	22.239
19021	16	12.250	17.229	19093	16	1.316	19.970	19165	13	7.451	20.838	19237	10	14.556	21.218	19309	10	25.636	22.808
19022*	65	12.394	17.552	19094	23	1.418	19.372	19166	14	7.546	20.423	19238	12	15.513	21.818	19310	11	0.257	23.638
19023	23	12.640	17.043	19095	10	1.776	19.850	19167	26	7.600	20.087	19239	10	18.642	21.798	19311	14	0.666	23.229
19024	21	13.060	17.408	19096	13	1.919	19.510	19168	13	7.906	20.992	19240*	73	18.934	21.814	19312	17	1.140	23.226
19025	19	13.066	17.196	19097	17	1.937	19.698	19169	19	8.134	20.982	19241	23	19.130	21.298	19313	26	2.008	23.916
19026	19	13.254	17.799	19098	37	4.511	19.911	19170	11	8.410	20.792	19242	10	19.424	21.610	19314	27	2.074	23.249
19027	27	14.974	17.761	19099	24	4.866	19.135	19171	13	9.250	20.667	19243	36	19.500	21.186	19315	17	3.660	23.484
19028	19	16.346	17.862	19100	12	4.884	19.622	19172	13	9.764	20.670	19244*	43	19.574	21.629	19316	11	5.235	23.940
19029	10	16.412	17.341	19101	9	6.861	19.961	19173	10	9.847	20.017	19245	15	19.705	21.576	19317	40	5.850	23.184
19030	10	17.479	17.199	19102*	47	6.875	19.235	19174	23	10.090	20.512	19246	32	19.876	21.406	19318	39	6.064	23.708
19031	12	17.686	17.616	19103	11	6.900	19.276	19175	11	10.972	20.580	19247*	46	20.246	21.836	19319	12	6.190	23.564
19032	21	17.927	17.638	19104	33	7.065	19.456	19176*	60	11.646	20.802	19248	12	20.726	21.378	19320	10	6.202	23.563
19033	13	18.630	17.131	19105	15	7.116	19.228	19177	14	12.836	20.694	19249	25	20.891	21.275	19321	10	6.410	23.554
19034	22	18.773	17.442	19106	12	7.137	19.022	19178	15	13.269	20.586	19250	14	21.805	21.710	19322	26	8.047	23.476
19035	10	18.800	17.908	19107	26	7.212	19.128	19179	19	13.724	20.086	19251	12	22.164	21.100	19323	10	8.878	23.046
19036	31	18.927	17.366	19108	27	7.275	19.612	19180	21	13.828	20.234	19252	20	23.432	21.410	19324*	42	9.230	23.149
19037	10	19.348	17.238	19109	16	8.590	19.390	19181	12	13.878	20.814	19253	9	23.524	21.493	19325	13	9.599	23.844
19038	10	23.823	17.341	19110	14	8.664	19.445	19182	12	14.160	20.085	19254	11	23.830	21.540	19326	14	9.860	23.373
19039	11	23.826	17.342	19111	13	9.270	19.510	19183	40	14.364	20.745	19255	13	24.185	21.470	19327	10	10.900	23.715
19040	10	24.217	17.940	19112*	42	9.270	19.710	19184	12	14.623	20.622	19256	13	25.271	21.804	19328	19	11.096	23.742
19041	23	24.330	17.628	19113	10	9.930	19.022	19185	29	15.150	20.954	19257	13	1.446	22.600	19329	13	11.184	23.457
19042	13	25.250	17.714	19114	9	10.664	19.190	19186	13	15.398	20.140	19258	9	1.751	22.298	19330	10	11.504	23.308
19043	21	25.651	17.844	19115	10	11.971	19.493	19187	13	15.506	20.436	19259	11	1.792	22.346	19331	39	11.855	23.944
19044	26	0.074	18.129	19116	28	12.622	19.300	19188	10	15.948	20.490	19260	10	2.701	22.463	19332	16	11.954	23.790
19045	9	1.422	18.193	19117	18	12.908	19.370	19189	10	16.506	20.213	19261	23	3.102	22.306	19333	13	12.508	23.288
19046	16	5.204	18.552	19118	10	13.084	19.275	19190	14	16.512	20.440	19262	39	3.556	22.098	19334	12	13.110	23.746
19047	10	5.647	18.294	19119	20	13.186	19.576	19191	10	16.618	20.492	19263	15	4.040	22.306	19335	34	13.676	23.828
19048	21	5.655	18.374	19120	12	13.420	19.842	19192	12	17.258	20.775	19264	12	5.390	22.590	19336	22	13.681	23.720
19049	12	5.736	18.800	19121	10	13.940	19.660	19193	10	18.272	20.600	19265	19	5.512	22.491	19337	23	15.030	23.036
19050	12	6.260	18.799	19122	27	14.674	19.245	19194	10	18.660	20.990	19266	10	5.940	22.034	19338	9	15.058	23.494
19051	10	7.103	18.655	19123	9	15.304	19.812	19195	11	19.124	20.773	19267	28	6.380	22.212	19339	11	15.108	23.380
19052	13	7.176	18.006	19124	13	15.426	19.453	19196	18	19.672	20.112	19268	29	6.616	22.550	19340	11	15.654	23.424
19053	14	7.290	18.856	19125	11	15.426	19.536	19197	12	20.158	20.844	19269	12	6.826	22.010	19341			



19352	11	0.049	24.128	19424	21	13.833	25.639	19480	16	19.224	0.244	19552	24	10.016	2.596	19624	34	23.298	3.786
19353	13	0.674	24.260	19425	24	14.874	25.811	19481	24	20.356	0.112	19553	36	10.710	2.243	19625	8	23.459	3.061
19354	19	1.056	24.204	19426	30	15.425	25.757	19482	10	20.406	0.956	19554	12	10.994	2.524	19626	13	23.786	3.103
19355	9	1.250	24.199	19427	15	15.582	25.275	19483	22	20.500	0.718	19555	16	11.450	2.860	19627	12	24.801	3.063
19356	24	2.607	24.030	19428	36	15.691	25.821	19484	19	20.816	0.015	19556	11	11.812	2.878	19628	11	25.161	3.335
19357	27	2.642	24.046	19429	12	15.782	25.426	19485	12	20.900	0.428	19557*	40	13.416	2.307	19629	15	25.408	3.878
19358*	44	3.684	24.435	19430	29	16.136	25.884	19486	16	20.918	0.136	19558	11	13.616	2.704	19630	15	25.685	3.558
19359	9	3.804	24.957	19431	21	16.344	25.986	19487	11	20.942	0.725	19559	16	13.686	2.722	19631	12	25.840	3.484
19360	11	4.030	24.864	19432	11	16.808	25.056	19488	32	21.216	0.946	19560	8	13.667	2.259	19632	13	0.365	4.148
19361	14	4.202	24.294	19433	21	17.292	25.806	19489	15	22.466	0.516	19561	14	14.096	2.344	19633	23	0.701	4.364
19362	21	5.199	24.410	19434	16	17.476	25.462	19490	14	22.666	0.169	19562	23	15.945	2.187	19634	13	1.111	4.328
19363	44	5.210	24.374	19435	14	17.882	25.844	19491	11	23.864	0.630	19563	9	16.306	2.921	19635	14	1.635	4.006
19364	9	6.490	24.587	19436	31	18.180	25.648	19492	18	0.762	1.030	19564	10	16.393	2.609	19636	40	2.188	4.237
19365	12	6.650	24.528	19437	14	19.960	25.922	19493	15	1.985	1.342	19565	8	16.692	2.903	19637	14	2.574	4.967
19366	10	6.762	24.338	19438	13	20.060	25.214	19494	11	3.150	1.736	19566	12	16.734	2.301	19638	39	3.376	4.162
19367	18	6.954	24.162	19439	10	20.974	25.033	19495*	48	4.224	1.836	19567	15	16.861	2.540	19639	14	3.519	4.566
19368	21	7.422	24.370	19440	12	21.425	25.841	19496*	54	4.661	1.125	19568	36	17.050	2.496	19640	16	3.606	4.416
19369	14	8.033	24.690	19441	33	22.618	25.990	19497	18	4.702	1.876	19569	17	17.088	2.620	19641	22	3.624	4.374
19370	14	9.149	24.098	19442	13	25.843	25.130	19498	15	5.074	1.634	19570	17	17.533	2.526	19642	12	4.320	4.548
19371	21	9.942	24.182					19499	19	5.553	1.938	19571	10	18.016	2.798	19643	14	5.150	4.428
19372*	49	10.335	24.138					19500	33	6.014	1.083	19572	13	18.806	2.646	19644	9	5.946	4.100
19373*	45	10.812	24.525					19501	14	6.060	1.828	19573	14	20.213	2.741	19645	10	6.056	4.904
19374	12	11.320	24.559					19502	38	6.571	1.296	19574	11	20.856	2.146	19646	10	6.755	4.436
19375	40	11.797	24.492					19503	11	6.662	1.176	19575*	52	21.064	2.612	19647	22	8.614	4.326
19376*	47	11.868	24.144					19504	10	7.288	1.198	19576	14	21.225	2.022	19648	20	9.134	4.926
19377	13	12.127	24.540					19505	15	7.698	1.430	19577	11	21.768	2.567	19649	21	9.754	4.472
19378	13	13.422	24.616					19506	12	8.074	1.402	19578	13	22.731	2.556	19650	14	10.520	4.078
19379	12	13.575	24.384					19507	9	8.310	1.703	19579	34	22.736	2.289	19651	29	10.900	4.172
19380	27	13.660	24.123					19508	15	8.612	1.775	19580	12	23.097	2.297	19652	8	11.134	4.181
19381	11	14.105	24.465					19509	10	9.728	1.250	19581	26	23.198	2.695	19653	25	11.822	4.276
19382	21	14.177	24.674					19510	9	10.198	1.945	19582*	78	23.536	2.549	19654	19	11.830	4.286
19383	11	14.314	24.960					19511	15	10.893	1.439	19583	37	24.360	2.978	19655	12	11.968	4.420
19384*	42	15.550	24.666					19512	14	10.922	1.295	19584	15	24.399	2.108	19656	16	13.224	4.734
19385	10	15.784	24.564					19513	12	12.409	1.664	19585	12	24.538	2.278	19657	14	13.463	4.366
19386	14	15.945	24.766					19514	26	13.094	1.342	19586	16	1.830	3.979	19658	10	13.558	4.234
19387	13	16.854	24.524					19515	12	14.420	1.787	19587	14	2.034	3.910	19659	10	13.686	4.034
19388	29	18.346	24.288					19516	34	14.533	1.652	19588	30	2.090	3.016	19660	11	14.510	4.192
19389	25	18.425	24.080					19517	12	14.823	1.376	19589	11	4.256	3.585	19661	10	15.002	4.512
19390	31	18.677	24.828					19518	16	14.850	1.409	19590	19	5.107	3.711	19662	26	15.034	4.006
19391	25	19.590	24.198					19519	18	16.016	1.616	19591	14	6.568	3.226	19663	11	15.364	4.624
19392	13	19.969	24.785					19520	17	16.116	1.245	19592	14	6.724	3.218	19664	20	15.725	4.044
19393	12	20.670	24.646					19521	21	16.882	1.824	19593	12	6.948	3.845	19665	16	16.702	4.700
19394	14	20.890	24.724					19522	13	17.489	1.616	19594	31	7.557	3.717	19666*	38	17.070	4.089
19395	14	21.196	24.450					19523	15	17.966	1.984	19595	16	8.698	3.906	19667	10	18.766	4.094
19396	23	22.316	24.584					19524	14	18.237	1.124	19596	16	8.970	3.844	19668	12	18.849	4.986
19397	13	22.631	24.036					19525	17	19.099	1.625	19597	32	10.054	3.161	19669	11	18.960	4.077
19398	10	23.538	24.343					19526	19	19.146	1.346	19598	12	11.576	3.626	19670	24	19.164	4.774
19399	10	23.572	24.536					19527	14	20.560	1.786	19599	14	12.020	3.092	19671	16	19.456	4.838
19400	27	23.751	24.440					19528	12	21.840	1.554	19600	10	12.491	3.687	19672	18	19.660	4.179
19401	34	24.594	24.616					19529	16	23.084	1.728	19601	32	12.516	3.563	19673	10	19.845	4.154
19402	12	24.694	24.268					19530	9	23.104	1.364	19602	16	12.834	3.516	19674	15	19.994	4.106
19403	13	1.780	25.551					19531	19	23.574	1.744	19603	11	13.540	3.586	19675	12	20.300	4.625
19404	43	2.766	25.585					19532	10	23.670	1.542	19604	15	13.571	3.102	19676	10	20.600	4.894
19405	10	3.097	25.080					19533	16	23.924	1.543	19605	9	13.727	3.478	19677	39	20.812	4.235
19406	14	4.240	25.110					19534	15	24.797	1.616	19606	13	14.083	3.862	19678	11	23.362	4.984
19407	11	4.854	25.020					19535	34	0.026	2.220	19607	8	14.237	3.336	19679	15	24.384	4.213
19408	12	6.110	25.758					19536	33	0.148	2.854	19608	19	14.326	3.166	19680	25	25.306	4.100
19409	23	6.155	25.900					19537	16	1.019	2.222	19609	8	14.494	3.189	19681	15	25.332	4.283
19410	73	7.893	25.276					19538	17	1.494	2.920	19610	9	14.819	3.988	19682	13	25.634	4.931
19411	53	8.990	25.986					19539	21	1.592	2.275	19611	21	15.116	3.368	19683	13	0.464	5.832
19412	13	9.000	25.568					19540	10	2.022	2.968	19612	13	16.344	3.522	19684	18	1.191	5.816
19413	57	9.461	25.400					19541	34	2.416	2.447	19613	23	16.448	3.338	19685	11	2.916	5.927
19414	22	9.567	25.171					19542	14	2.416	2.385	19614	9	17.683	3.007	19686	28	3.886	5.856
19415	30	10.130	25.252					19543	26	5.215	2.197	19615	11	18.351	3.500	19687	24	4.006	5.135
19416	23	10.154	25.123					19544	14	5.392	2.075	19616	25	18.571	3.667	19688	21	4.088	5.329
19417	21	10.388	25.107					19545	17	6.376	2.454	19617	18	19.666	3.463	19689	12	4.489	5.042
19418	18	10.534	25.524					19546	11	7.843	2.315	19618	12	19.783	3.705	19690	24	5.509	5.502
19419	10	11.850	25.052					19547	11	8.295	2.220	19619	11	19.883	3.485	19691	12	5.924	5.810
19420																			



19696	13	7.630	5.714	19768	16	12.064	6.455	19840	27	1.840	8.884	19912	8	13.990	9.424	19984	9	14.552	10.227
19697	10	8.408	5.634	19769	32	13.876	6.577	19841	9	2.490	8.350	19913	20	14.272	9.715	19985	17	15.522	10.350
19698	11	8.928	5.796	19770	8	14.362	6.632	19842*	32	2.944	8.360	19914	14	14.483	9.682	19986*	36	16.259	10.476
19699	10	8.926	5.432	19771	9	14.466	6.837	19843	12	3.805	8.160	19915	9	14.566	9.526	19987	9	17.382	10.600
19700	22	8.969	5.522	19772	12	15.428	6.016	19844	14	3.916	8.408	19916	9	14.902	9.264	19988*	120	17.894	10.422
19701	12	9.169	5.437	19773	13	15.620	6.728	19845*	40	4.914	8.036	19917	11	14.913	9.236	19989	34	18.572	10.235
19702	26	9.334	5.626	19774	8	15.798	6.824	19846*	40	5.569	8.283	19918	20	14.972	9.143	19990	8	18.628	10.713
19703	12	9.339	5.027	19775	12	15.998	6.778	19847	11	6.536	8.244	19919	15	15.222	9.485	19991*	48	18.814	10.574
19704	13	10.195	5.852	19776	8	16.276	6.934	19848	10	7.010	8.165	19920	8	15.514	9.787	19992	9	19.694	10.484
19705	26	10.214	5.242	19777	15	16.507	6.128	19849	16	8.516	8.100	19921	11	15.524	9.108	19993	21	19.790	10.387
19706	11	10.374	5.288	19778	11	16.700	6.716	19850	9	9.340	8.336	19922	23	15.898	9.358	19994	11	20.237	10.632
19707	13	11.244	5.738	19779	22	16.716	6.973	19851	10	9.373	8.388	19923	15	15.984	9.022	19995	12	21.394	10.699
19708	14	12.245	5.384	19780	8	18.452	6.008	19852	9	9.722	8.571	19924	16	16.684	9.392	19996	20	21.604	10.850
19709	15	12.532	5.050	19781	11	18.564	6.986	19853	16	9.826	8.973	19925	10	16.732	9.321	19997	14	22.562	10.060
19710	13	13.080	5.402	19782	13	19.274	6.663	19854	12	10.093	8.594	19926	8	16.774	9.862	19998	38	22.874	10.701
19711	20	13.354	5.433	19783	13	19.396	6.326	19855	11	10.102	8.606	19927	16	16.804	9.398	19999	8	23.446	10.566
19712	20	13.534	5.848	19784	10	20.131	6.955	19856	10	10.437	8.664	19928	11	17.470	9.945	20000	12	23.668	10.232
19713	12	13.765	5.199	19785	15	20.340	6.417	19857	11	11.234	8.266	19929	12	17.564	9.812	20001	14	23.676	10.856
19714*	37	13.818	5.594	19786	32	20.520	6.231	19858	15	11.930	8.477	19930	11	18.279	9.886	20002*	34	24.832	10.412
19715*	44	15.332	5.816	19787	17	20.626	6.624	19859	13	11.966	8.792	19931	8	18.321	9.946	20003*	78	25.147	10.293
19716	11	16.513	5.550	19788	11	20.720	6.294	19860	12	12.578	8.836	19932	3	18.700	9.226	20004	19	0.002	11.522
19717	11	17.192	5.284	19789	14	21.316	6.058	19861	13	12.633	8.042	19933	11	18.776	9.178	20005	24	0.076	11.520
19718	24	17.271	5.476	19790	9	21.480	6.062	19862	20	13.266	8.226	19934	16	19.541	9.316	20006	11	0.840	11.000
19719	9	17.760	5.715	19791	21	21.646	6.924	19863	13	13.398	8.010	19935	10	19.715	9.122	20007	17	1.892	11.652
19720	9	17.842	5.186	19792	9	24.448	6.214	19864	10	14.250	8.264	19936	34	20.935	9.583	20008	17	2.786	11.596
19721	11	18.016	5.884	19793	10	24.828	6.653	19865	15	15.028	8.700	19937	10	20.922	9.900	20009	16	4.376	11.720
19722	26	19.043	5.186	19794	36	24.906	6.066	19866	10	15.152	8.615	19938	9	21.516	9.838	20010	13	4.615	11.722
19723	10	19.357	5.608	19795	15	25.960	6.117	19867	17	15.354	8.024	19939*	52	21.606	9.312	20011	8	5.026	11.949
19724	12	20.033	5.174	19796	10	0.606	7.832	19868	17	16.184	8.954	19940	11	21.776	9.152	20012	15	5.058	11.054
19725	24	21.110	5.818	19797	8	2.180	7.614	19869	10	16.462	8.806	19941	20	21.856	9.838	20013	9	5.111	11.548
19726	18	21.280	5.395	19798*	48	4.618	7.174	19870	14	17.592	8.570	19942	17	21.940	9.356	20014	14	5.190	11.734
19727	14	21.339	5.996	19799	15	4.807	7.110	19871	10	17.980	8.806	19943	10	22.210	9.883	20015	12	5.193	11.995
19728	10	21.350	5.408	19800	34	5.649	7.758	19872	10	18.285	8.810	19944	12	22.691	9.943	20016	11	6.684	11.144
19729	14	21.470	5.309	19801	16	6.196	7.914	19873	16	18.704	8.616	19945	12	23.406	9.698	20017	16	6.794	11.521
19730	14	21.814	5.116	19802	9	6.443	7.547	19874	15	19.830	8.920	19946	13	24.600	9.911	20018	10	10.428	11.423
19731	36	22.528	5.499	19803	9	6.542	7.674	19875	12	20.016	8.376	19947	10	24.674	9.015	20019	10	10.475	11.291
19732	15	22.598	5.626	19804	10	6.552	7.852	19876	19	20.750	8.966	19948	10	24.721	9.987	20020	12	12.467	11.155
19733	12	22.838	5.409	19805*	38	6.737	7.704	19877	19	21.627	8.258	19949	10	24.954	9.107	20021	16	12.498	11.968
19734	21	23.166	5.580	19806	9	6.872	7.413	19878	12	22.674	8.690	19950	12	0.550	10.904	20022	18	12.510	11.596
19735	13	23.287	5.302	19807	12	6.965	7.168	19879	17	22.788	8.078	19951	13	0.792	10.634	20023	10	12.650	11.992
19736	9	23.878	5.312	19808	16	9.589	7.142	19880	22	23.824	8.763	19952	12	1.435	10.408	20024	10	12.769	11.200
19737	23	24.218	5.074	19809	36	10.278	7.465	19881	11	23.972	8.256	19953	13	1.635	10.002	20025	10	13.809	11.864
19738	20	25.150	5.384	19810	10	10.360	7.942	19882	10	24.335	8.592	19954	13	2.695	10.296	20026	11	13.865	11.038
19739	12	25.192	5.156	19811	8	10.719	7.816	19883	10	24.496	8.377	19955	8	3.044	10.316	20027	16	14.023	11.568
19740	12	25.456	5.656	19812	14	11.019	7.425	19884	46	25.830	8.355	19956	14	4.364	10.268	20028	19	14.494	11.884
19741	15	0.080	6.262	19813	15	11.100	7.874	19885	11	25.870	8.164	19957	12	4.698	10.558	20029	11	15.599	11.338
19742	16	1.376	6.119	19814	17	11.366	7.002	19886	15	0.538	9.986	19958	11	5.451	10.995	20030	36	16.370	11.554
19743	32	2.010	6.845	19815	19	11.934	7.959	19887	10	2.516	9.716	19959	8	5.514	10.416	20031	12	16.814	11.688
19744	15	2.514	6.892	19816	11	12.244	7.102	19888	17	4.350	9.968	19960	11	6.082	10.436	20032	8	17.231	11.895
19745	13	3.926	6.985	19817	9	12.242	7.966	19889	23	4.959	9.453	19961	8	6.239	10.698	20033	9	17.292	11.479
19746	14	4.446	6.485	19818	8	12.306	7.490	19890	18	5.146	9.844	19962	9	6.462	10.288	20034	12	17.515	11.694
19747	29	6.176	6.650	19819	14	13.100	7.160	19891	20	5.550	9.322	19963	11	6.472	10.292	20035	16	18.373	11.900
19748	16	6.326	6.628	19820	19	13.340	7.316	19892	10	5.606	9.236	19964	14	6.834	10.896	20036	10	18.942	11.366
19749	15	6.350	6.015	19821	16	13.626	7.353	19893	8	5.936	9.506	19965	9	7.237	10.228	20037	14	19.285	11.775
19750	23	6.386	6.218	19822	12	13.644	7.166	19894	11	5.954	9.784	19966	12	7.304	10.489	20038	12	19.421	11.177
19751	12	6.524	6.406	19823	14	14.204	7.591	19895	11	6.132	9.656	19967	15	7.568	10.408	20039	13	19.618	11.254
19752	9	6.573	6.297	19824	10	14.922	7.448	19896	13	6.904	9.092	19968	9	7.708	10.708	20040	12	20.228	11.554
19753	16	6.734	6.716	19825	8	15.953	7.806	19897	15	8.245	9.464	19969	9	7.829	10.282	20041	8	20.424	11.661
19754	11	6.888	6.761	19826	20	16.130	7.851	19898	10	8.252	9.633	19970*	44	8.116	10.149	20042	13	20.627	11.120
19755	11	6.981	6.780	19827	12	17.770	7.763	19899	9	9.124	9.039	19971	18	8.410	10.636	20043	18	21.642	11.694
19756	9	7.224	6.552	19828	12	17.797	7.332	19900	10	9.272	9.106	19972	13	8.507	10.613	20044	10	22.093	11.738
19757	8	7.257	6.756	19829	13	18.756	7.524	19901	16	9.670	9.466	19973	10	9.620	10.022	20045	13	22.968	11.658
19758	23	8.300	6.576	19830	34	18.905	7.712	19902	12	9.850	9.836	19974	14	9.790	10.866	20046	16	23.222	11.241
19759	22																		



20056	23	3.494	12.826	20128	13	9.690	13.102	20200	11	12.194	14.865	20272	11	13.111	15.861	20344	10	17.300	16.792
20057	26	3.690	12.126	20129	14	11.004	13.748	20201	12	12.292	14.410	20273	11	13.285	15.674	20345	14	18.040	16.214
20058	12	4.436	12.537	20130	28	11.189	13.364	20202	13	12.427	14.597	20274	14	13.346	15.418	20346	14	18.132	16.295
20059	9	4.552	12.370	20131	14	11.530	13.568	20203	16	12.439	14.876	20275	12	13.926	15.582	20347	13	18.728	16.642
20060	10	5.444	12.553	20132	8	11.751	13.256	20204	14	12.487	14.744	20276	34	14.174	15.934	20348	13	19.460	16.769
20061	10	5.624	12.840	20133	9	12.086	13.716	20205	11	12.557	14.764	20277	12	14.200	15.162	20349	12	19.998	16.836
20062	13	5.663	12.464	20134	13	12.640	13.984	20206	9	12.570	14.172	20278	9	14.344	15.032	20350	10	20.392	16.142
20063	16	5.894	12.267	20135	11	12.667	13.386	20207	9	12.956	14.452	20279	10	14.494	15.826	20351	18	20.791	16.796
20064	15	7.606	12.522	20136	15	12.730	13.648	20208	13	13.489	14.506	20280	21	14.522	15.176	20352*	39	21.993	16.713
20065	17	8.240	12.284	20137	9	12.756	13.024	20209	15	14.292	14.445	20281	9	14.822	15.210	20353	9	23.687	16.049
20066	19	8.466	12.479	20138	12	12.944	13.512	20210	12	14.349	14.966	20282	18	14.836	15.364	20354	18	24.128	16.798
20067	11	8.516	12.822	20139	21	13.040	13.208	20211	12	14.928	14.792	20283	10	14.967	15.422	20355	20	24.145	16.404
20068	11	9.264	12.752	20140	15	13.196	13.860	20212	10	16.870	14.189	20284	11	15.056	15.422	20356	9	24.257	16.887
20069	12	9.494	12.630	20141	11	13.237	13.758	20213	21	17.086	14.306	20285	9	15.191	15.729	20357	9	24.338	16.333
20070	23	9.565	12.529	20142	16	13.474	13.064	20214	10	17.420	14.596	20286	10	15.775	15.392	20358	11	24.478	16.443
20071	13	11.103	12.698	20143	16	13.490	13.000	20215	14	17.726	14.165	20287	10	16.027	15.079	20359	30	24.498	16.692
20072	9	11.252	12.324	20144	10	13.616	13.024	20216	16	18.256	14.228	20288	19	17.936	15.664	20360	16	25.568	16.522
20073	11	11.268	12.200	20145	10	14.520	13.308	20217	11	18.400	14.278	20289	17	19.058	15.005	20361	23	25.964	16.990
20074	20	13.678	12.943	20146	11	14.745	13.596	20218	16	18.676	14.458	20290	18	19.706	15.880	20362	14	1.745	17.678
20075	20	13.732	12.536	20147	14	15.361	13.786	20219	9	19.188	14.884	20291	11	20.402	15.126	20363	15	2.250	17.959
20076*	40	13.756	12.955	20148	36	15.458	13.986	20220	19	19.186	14.276	20292	10	20.514	15.606	20364	14	3.405	17.214
20077	12	13.784	12.073	20149	37	15.532	13.546	20221	12	19.186	14.064	20293	16	20.600	15.973	20365	9	3.570	17.669
20078	10	14.415	12.328	20150	19	15.706	13.707	20222	13	19.784	14.274	20294	11	21.234	15.806	20366	12	3.960	17.838
20079	21	14.602	12.236	20151	13	15.840	13.422	20223	9	20.928	14.878	20295	9	22.627	15.524	20367	9	4.228	17.424
20080	12	15.837	12.398	20152	16	15.964	13.051	20224	9	21.510	14.710	20296	32	24.240	15.656	20368	17	4.266	17.896
20081	8	15.960	12.587	20153	13	15.966	13.856	20225	11	22.424	14.686	20297	9	24.560	15.528	20369	10	5.394	17.533
20082	28	16.110	12.695	20154	11	16.640	13.627	20226	11	23.380	14.276	20298	32	25.747	15.628	20370	9	5.417	17.838
20083	8	16.972	12.434	20155	10	16.725	13.266	20227	19	23.463	14.674	20299	10	0.399	16.306	20371	22	5.818	17.451
20084	14	17.210	12.942	20156	9	17.099	13.723	20228	11	23.674	14.894	20300	14	0.849	16.405	20372	12	6.170	17.950
20085	23	17.300	12.256	20157	14	17.256	13.732	20229	18	23.820	14.274	20301	16	0.957	16.677	20373	15	6.626	17.566
20086*	44	18.329	12.656	20158	22	17.459	13.404	20230	18	24.106	14.183	20302	30	1.033	16.296	20374	10	7.324	17.356
20087	10	18.668	12.030	20159	12	17.934	13.736	20231	16	25.033	14.836	20303	18	1.630	16.904	20375	10	7.533	17.875
20088	15	19.389	12.826	20160	9	18.325	13.325	20232	18	25.422	14.682	20304	36	1.951	16.099	20376	20	7.884	17.122
20089	16	19.941	12.934	20161	16	18.486	13.557	20233	9	25.540	14.216	20305	9	2.426	16.184	20377	10	8.046	17.357
20090	21	19.966	12.308	20162	19	19.181	13.574	20234	22	1.772	15.452	20306	20	2.806	16.273	20378	11	8.454	17.992
20091	12	20.016	12.336	20163	19	19.628	13.571	20235	13	1.870	15.910	20307	18	3.280	16.752	20379	13	9.126	17.990
20092	14	20.924	12.006	20164	21	19.947	13.553	20236	11	1.944	15.878	20308	20	3.406	16.622	20380	14	9.210	17.198
20093	15	21.164	12.485	20165	15	20.025	13.634	20237	23	2.084	15.521	20309	9	5.692	16.679	20381	12	9.438	17.916
20094	9	21.185	12.121	20166	10	20.087	13.964	20238	11	2.258	15.509	20310	8	5.987	16.220	20382	11	9.440	17.544
20095	11	21.975	12.564	20167	26	20.608	13.387	20239	16	2.294	15.265	20311	13	6.073	16.384	20383	11	10.500	17.834
20096	11	22.108	12.074	20168	19	21.616	13.693	20240	9	2.436	15.973	20312	16	7.006	16.184	20384	8	10.606	17.597
20097	18	22.156	12.776	20169	9	22.148	13.762	20241	9	2.561	15.147	20313	12	7.284	16.993	20385	10	11.536	17.556
20098	9	23.068	12.385	20170	26	22.322	13.732	20242	16	2.938	15.714	20314	8	7.890	16.788	20386	12	11.565	17.116
20099	15	23.216	12.271	20171	10	23.412	13.921	20243	10	3.880	15.686	20315	18	8.018	16.507	20387	12	12.253	17.646
20100	14	23.460	12.378	20172	20	23.479	13.477	20244	15	4.154	15.274	20316	21	8.698	16.984	20388	11	12.280	17.420
20101	13	23.616	12.555	20173	21	24.170	13.653	20245	9	4.543	15.897	20317	10	9.333	16.446	20389	15	12.349	17.514
20102	16	24.186	12.924	20174	14	24.684	13.334	20246	12	5.048	15.852	20318	21	10.134	16.588	20390	12	12.585	17.364
20103	12	24.530	12.676	20175	11	25.284	13.814	20247	10	5.431	15.706	20319	20	10.894	16.957	20391	19	13.084	17.600
20104	19	24.555	12.538	20176	26	25.567	13.786	20248	11	5.450	15.475	20320	11	10.910	16.310	20392	9	13.751	17.587
20105	9	24.649	12.331	20177	8	25.750	13.684	20249	9	5.503	15.508	20321	16	11.372	16.296	20393	13	14.104	17.774
20106	10	24.992	12.176	20178	38	25.998	13.106	20250	13	5.726	15.892	20322	11	11.429	16.061	20394	34	14.274	17.550
20107	9	25.293	12.402	20179	22	0.088	14.764	20251	13	6.282	15.396	20323	20	12.019	16.314	20395	10	14.376	17.080
20108	12	25.334	12.106	20180	15	1.883	14.224	20252	10	6.431	15.971	20324	13	12.342	16.617	20396	18	14.614	17.096
20109	8	25.796	12.364	20181	18	3.050	14.850	20253	19	7.357	15.742	20325	14	12.388	16.824	20397	9	14.723	17.158
20110	9	0.974	13.235	20182	12	3.313	14.654	20254	12	8.089	15.924	20326	15	13.486	16.720	20398	8	14.863	17.074
20111*	36	2.026	13.049	20183	16	3.352	14.582	20255	10	8.108	15.938	20327	11	13.490	16.712	20399	9	15.600	17.789
20112	14	2.416	13.506	20184	19	4.076	14.017	20256*	41	8.124	15.332	20328	15	13.650	16.738	20400	9	15.644	17.780
20113	17	2.440	13.227	20185	20	5.540	14.175	20257*	40	8.983	15.881	20329	8	13.764	16.075	20401	11	16.166	17.336
20114	20	3.859	13.274	20186	23	5.960	14.850	20258	12	9.752	15.932	20330	12	14.150	16.896	20402	8	16.796	17.566
20115	10	3.936	13.114	20187	9	6.314	14.690	20259	12	10.133	15.903	20331	12	14.234	16.968	20403	14	16.828	17.016
20116	16	4.064	13.267	20188	13	6.385	14.934	20260	12	10.400	15.490	20332	10	14.347	16.534	20404	31	16.884	17.334
20117	16	4.272	13.814	20189	16	6.956	14.682	20261	11	10.467	15.330	20333	10	14.388	16.128	20405	15	16.968</	



20416	8	24.127	17.162	20488	15	6.780	19.933	20560	14	23.836	20.916	20632	16	16.689	22.278	20704	9	13.135	24.072
20417	8	24.142	17.578	20489	10	7.338	19.762	20561	23	23.846	20.662	20633	14	17.724	22.330	20705	10	13.233	24.012
20418	32	24.549	17.502	20490	21	7.582	19.436	20562	44	25.992	20.956	20634*	40	17.770	22.754	20706	16	15.160	24.913
20419	9	25.684	17.314	20491	11	10.046	19.838	20563	12	1.400	21.156	20635	13	17.924	22.375	20707	26	15.182	24.614
20420	11	0.902	18.379	20492	15	10.133	19.452	20564	15	1.404	21.752	20636	34	18.101	22.556	20708*	38	15.252	24.568
20421*	36	2.573	18.716	20493	13	10.240	19.585	20565	10	1.664	21.004	20637	9	18.136	22.021	20709	44	16.835	24.227
20422	11	3.174	18.031	20494	10	10.567	19.554	20566	9	2.164	21.803	20638	32	19.426	22.776	20710	15	17.326	24.176
20423	13	3.553	18.364	20495	20	10.678	19.542	20567	11	4.738	21.564	20639	12	19.666	22.516	20711	12	18.090	24.323
20424	17	3.575	18.156	20496	13	11.225	19.482	20568	11	4.960	21.416	20640	13	20.291	22.233	20712	11	18.694	24.132
20425	14	4.611	18.288	20497	13	12.138	19.824	20569	10	5.260	21.024	20641	17	20.931	22.116	20713	12	19.522	24.300
20426	24	5.178	18.916	20498	31	12.476	19.844	20570	12	8.070	21.691	20642	24	21.498	22.068	20714	19	20.426	24.392
20427	14	6.230	18.104	20499	12	12.877	19.880	20571	25	8.366	21.494	20643	13	21.842	22.556	20715*	66	21.324	24.586
20428	14	6.411	18.970	20500	11	14.966	19.124	20572	11	9.410	21.364	20644	16	22.042	22.884	20716	28	21.862	24.406
20429	12	6.455	18.401	20501	14	15.207	19.598	20573	12	10.078	21.696	20645	22	24.058	22.370	20717*	59	22.585	24.132
20430	14	6.534	18.314	20502	15	15.612	19.719	20574	14	10.725	21.306	20646	13	24.114	22.248	20718	13	22.834	24.674
20431	9	6.632	18.565	20503	19	15.751	19.756	20575*	48	11.322	21.706	20647	22	24.748	22.031	20719	18	23.490	24.388
20432	9	7.192	18.444	20504	11	16.440	19.214	20576	34	11.506	21.836	20648	24	25.218	22.744	20720	35	23.932	24.458
20433	12	7.976	18.226	20505	16	16.848	19.763	20577	10	12.106	21.834	20649	13	2.373	23.110	20721	12	24.236	24.810
20434	10	9.335	18.726	20506	14	17.008	19.073	20578	14	12.572	21.336	20650	19	2.544	23.306	20722	15	25.504	24.242
20435	14	10.654	18.293	20507	11	17.452	19.018	20579	12	12.794	21.206	20651	12	4.881	23.844	20723	13	3.871	25.440
20436	11	10.696	18.198	20508	14	18.858	19.518	20580	16	12.812	21.306	20652	19	5.523	23.395	20724	11	4.859	25.244
20437	9	10.900	18.248	20509	34	19.430	19.498	20581	16	13.022	21.967	20653	10	6.042	23.323	20725	29	5.358	25.639
20438	8	11.146	18.806	20510	17	19.461	19.374	20582	13	13.266	21.140	20654	12	7.252	23.736	20726	17	8.232	25.752
20439	21	11.574	18.842	20511	13	19.760	19.810	20583	39	14.127	21.264	20655	15	8.252	23.806	20727	10	9.900	25.850
20440	11	11.756	18.716	20512	12	19.877	19.644	20584	11	15.966	21.924	20656*	54	8.352	23.614	20728	29	9.987	25.494
20441	11	12.052	18.406	20513	13	19.914	19.679	20585	21	16.867	21.564	20657*	52	8.468	23.356	20729	12	10.154	25.538
20442	15	12.164	18.026	20514	23	20.298	19.842	20586	13	17.016	21.892	20658	12	10.986	23.047	20730	17	12.350	25.016
20443	20	12.328	18.650	20515	36	20.450	19.764	20587	17	17.069	21.066	20659	17	10.994	23.036	20731	11	13.158	25.770
20444	17	12.710	18.646	20516	12	20.519	19.914	20588	14	17.084	21.048	20660	16	12.154	23.074	20732	11	13.448	25.316
20445	9	12.914	18.436	20517	10	21.452	19.136	20589	18	17.194	21.874	20661	13	12.330	23.484	20733	40	15.429	25.588
20446	11	13.492	18.122	20518	15	23.100	19.113	20590	14	17.265	21.696	20662	38	12.366	23.254	20734	10	15.492	25.567
20447	12	13.625	18.394	20519	13	23.318	19.510	20591	11	17.690	21.474	20663	36	12.516	23.556	20735	16	15.590	25.735
20448	12	14.034	18.816	20520	12	24.144	19.015	20592*	37	18.431	21.537	20664	16	12.771	23.404	20736	18	15.638	25.456
20449	23	14.104	18.272	20521	19	0.117	20.976	20593	15	19.394	21.104	20665	15	13.159	23.856	20737	18	16.190	25.919
20450	18	14.302	18.244	20522	11	1.018	20.626	20594	15	19.436	21.884	20666	14	13.194	23.887	20738	32	16.990	25.066
20451	21	15.197	18.062	20523	14	1.433	20.376	20595	15	19.492	21.833	20667	36	13.460	23.334	20739	20	17.457	25.400
20452	11	15.420	18.124	20524	12	1.518	20.432	20596	14	20.430	21.776	20668	12	13.762	23.126	20740	15	17.765	25.798
20453*	42	15.806	18.907	20525	16	1.600	20.152	20597	36	20.523	21.684	20669	18	13.864	23.346	20741	36	17.800	25.234
20454	11	16.119	18.447	20526	9	2.161	20.823	20598	11	21.413	21.513	20670	15	15.256	23.818	20742	13	17.828	25.150
20455	11	17.074	18.710	20527	24	3.146	20.255	20599	19	22.365	21.683	20671	12	16.182	23.769	20743	36	17.974	25.238
20456	12	17.692	18.248	20528	13	3.234	20.200	20600	26	22.496	21.999	20672	14	17.600	23.165	20744	13	19.774	25.864
20457	9	17.777	18.728	20529	11	3.498	20.704	20601	14	22.896	21.625	20673	26	18.430	23.577	20745	32	19.905	25.216
20458	11	18.424	18.277	20530*	38	3.700	20.756	20602	14	23.165	21.037	20674	19	18.498	23.519	20746	13	19.992	25.345
20459	9	20.460	18.298	20531	10	4.724	20.478	20603	33	23.370	21.357	20675	11	19.524	23.840	20747	11	21.515	25.152
20460	15	21.026	18.176	20532	17	5.166	20.140	20604	20	23.731	21.105	20676	15	21.434	23.865	20748	23	22.436	25.636
20461	14	21.284	18.714	20533	17	5.380	20.032	20605	28	24.760	21.564	20677	13	21.813	23.586	20749	14	24.458	25.680
20462	17	21.790	18.544	20534	12	5.643	20.855	20606	13	24.878	21.733	20678	23	23.866	23.972	20750	28	24.743	25.590
20463	13	21.900	18.963	20535	11	5.750	20.230	20607	16	2.214	22.783	20679	12	24.826	23.173	20751	13	25.728	25.764
20464	10	22.028	18.392	20536*	38	6.950	20.194	20608	16	2.832	22.928	20680	28	25.007	23.246				
20465	12	22.050	18.616	20537	12	7.423	20.370	20609	12	3.250	22.122	20681	33	25.559	23.204				
20466	34	22.278	18.164	20538	13	8.426	20.598	20610	34	4.020	22.918	20682	12	25.714	23.958				
20467	10	22.486	18.527	20539	14	9.444	20.710	20611	11	4.208	22.898	20683	18	0.334	24.942				
20468	10	22.535	18.734	20540	16	9.773	20.295	20612	10	4.353	22.956	20684	11	0.644	24.388				
20469	17	22.592	18.074	20541	16	9.836	20.960	20613	13	4.807	22.198	20685	23	1.342	24.324				
20470	11	22.630	18.340	20542	14	11.006	20.666	20614	10	6.240	22.764	20686	28	1.770	24.777				
20471	17	24.568	18.676	20543	20	11.162	20.234	20615	15	6.341	22.359	20687	34	2.613	24.942				
20472	11	25.086	18.034	20544	13	11.471	20.994	20616	26	6.390	22.204	20688	12	2.713	24.596				
20473	11	25.356	18.279	20545	12	12.176	20.259	20617	13	7.606	22.430	20689	16	2.847	24.014				
20474	18	0.402	19.298	20546	24	14.884	20.594	20618	30	7.817	22.664	20690	21	4.264	24.710				
20475	11	0.478	19.146	20547	14	15.130	20.893	20619	37	8.666	22.686	20691	12	5.150	24.503				
20476	13	0.813	19.800	20548	21	15.636	20.160	20620	19	8.690	22.646	20692	34	5.256	24.931				
20477	11	0.922	19.468	20549	10	16.584	20.282	20621	22	9.410	22.874	20693	13	5.692	24.776				
20478	14	1.054	19.924	20550	15	16.694	20.181	20622	12	10.076	22.032	20694	32	7.319	24.545				
20479	9	1.286	19.491	20551	13	17.056	20.380	20623											



20804	8	1.606	0.655	20876	33	22.174	1.280	20948	15	3.486	3.712	21020	24	10.956	4.239	21092	24	12.306	5.046
20805	15	1.655	0.794	20877*	46	23.827	1.340	20949	20	3.644	3.637	21021	10	11.074	4.024	21093	14	12.319	5.550
20806	10	4.528	0.132	20878*	32	24.904	1.371	20950	9	3.787	3.634	21022	8	11.506	4.302	21094	18	15.018	5.640
20807	10	4.740	0.693	20879	8	24.949	1.146	20951	29	3.970	3.224	21023	12	12.875	4.398	21095	12	15.110	5.244
20808	12	4.828	0.666	20880	29	25.060	1.953	20952	35	4.296	3.695	21024	18	12.882	4.294	21096	8	16.504	5.162
20809*	52	6.032	0.175	20881	14	25.514	1.400	20953	32	4.654	3.191	21025	9	13.093	4.182	21097	8	16.608	5.822
20810	8	6.649	0.490	20882	8	0.345	2.035	20954	8	4.756	3.563	21026	23	13.329	4.374	21098	8	17.676	5.310
20811	25	6.787	0.850	20883	8	0.526	2.724	20955	23	5.032	3.392	21027	16	13.806	4.228	21099	14	18.310	5.896
20812	30	7.302	0.830	20884	30	0.530	2.461	20956	13	5.140	3.537	21028	9	14.130	4.088	21100	9	18.370	5.698
20813	11	7.450	0.122	20885	12	0.894	2.467	20957	27	5.442	3.730	21029	14	14.484	4.338	21101	9	19.509	5.934
20814	30	7.778	0.052	20886	24	0.996	2.866	20958	8	5.804	3.428	21030	40	14.504	4.100	21102	29	20.224	5.067
20815	34	7.788	0.550	20887*	63	1.322	2.713	20959	14	6.472	3.261	21031	17	14.534	4.013	21103	27	20.909	5.803
20816	8	9.865	0.167	20888	8	1.489	2.389	20960	9	7.622	3.102	21032	17	14.992	4.982	21104	21	21.504	5.136
20817	9	10.598	0.658	20889	14	2.194	2.270	20961	12	7.750	3.350	21033	40	15.955	4.477	21105	35	22.346	5.036
20818	8	10.889	0.340	20890	13	2.332	2.435	20962	11	8.070	3.128	21034	26	16.150	4.719	21106	8	1.366	6.605
20819	10	11.035	0.909	20891	8	3.756	2.408	20963	19	8.142	3.228	21035	22	17.655	4.952	21107	11	2.266	6.376
20820	10	12.986	0.542	20892	10	3.840	2.619	20964	23	8.660	3.342	21036	30	18.646	4.928	21108	12	2.649	6.808
20821	10	13.569	0.058	20893	11	4.216	2.701	20965	11	9.228	3.641	21037	19	19.005	4.734	21109	36	2.720	6.224
20822	14	13.695	0.040	20894	18	4.610	2.289	20966	13	9.578	3.949	21038	23	19.078	4.610	21110	8	2.930	6.372
20823	17	13.850	0.736	20895	21	5.126	2.850	20967	16	10.684	3.090	21039	23	19.176	4.939	21111	22	3.778	6.270
20824	8	14.477	0.064	20896	9	5.276	2.953	20968	11	11.010	3.410	21040	23	19.800	4.575	21112	8	4.379	6.833
20825	13	14.658	0.135	20897*	51	6.208	2.802	20969	12	11.206	3.096	21041	37	20.986	4.034	21113	8	4.672	6.278
20826	18	14.910	0.425	20898	36	6.222	2.801	20970	9	11.480	3.746	21042	8	21.286	4.720	21114	17	5.436	6.490
20827	27	14.992	0.244	20899	25	7.262	2.728	20971	10	12.376	3.986	21043	36	22.932	4.912	21115	11	5.777	6.670
20828	28	16.900	0.326	20900	25	7.496	2.624	20972	21	12.547	3.626	21044	8	23.240	4.732	21116	15	5.796	6.972
20829	29	16.902	0.066	20901	8	8.852	2.206	20973	29	13.108	3.880	21045*	57	23.489	4.454	21117	22	5.904	6.746
20830	25	17.086	0.396	20902	9	8.958	2.823	20974	14	13.745	3.114	21046	15	24.648	4.809	21118	17	6.335	6.568
20831	26	17.274	0.240	20903	11	10.036	2.211	20975	17	14.223	3.118	21047	12	24.966	4.858	21119	10	6.604	6.250
20832	9	19.156	0.317	20904	11	10.216	2.413	20976	22	14.409	3.953	21048*	39	25.009	4.560	21120	8	6.600	6.943
20833	32	20.736	0.448	20905	15	10.244	2.181	20977	27	15.960	3.405	21049	13	25.590	4.172	21121	11	7.035	6.441
20834	18	21.706	0.940	20906	29	10.898	2.314	20978*	41	16.025	3.894	21050	8	0.289	5.594	21122	8	7.152	6.794
20835	12	22.347	0.893	20907	8	10.942	2.943	20979	29	16.428	3.487	21051	33	0.341	5.674	21123	17	8.194	6.790
20836	13	22.439	0.912	20908	27	11.526	2.880	20980*	52	18.027	3.492	21052	19	0.414	5.796	21124	9	8.302	6.294
20837	21	22.998	0.360	20909	11	11.776	2.104	20981	10	18.974	3.086	21053	8	0.524	5.199	21125	25	8.322	6.548
20838	24	25.804	0.480	20910	11	12.238	2.901	20982	14	19.115	3.832	21054	10	0.653	5.581	21126	8	8.936	6.654
20839	17	0.878	1.898	20911	22	12.253	2.836	20983	10	19.816	3.345	21055	23	0.980	5.746	21127	27	9.440	6.825
20840	10	0.896	1.533	20912	8	12.282	2.154	20984	9	20.270	3.307	21056	13	1.100	5.469	21128	21	9.602	6.166
20841	21	1.364	1.912	20913	10	13.050	2.267	20985	9	21.800	3.165	21057	10	1.170	5.152	21129	23	10.604	6.780
20842	9	1.461	1.708	20914	31	13.418	2.417	20986	12	22.645	3.825	21058	10	1.687	5.475	21130	8	10.661	6.746
20843	18	1.714	1.704	20915	12	13.970	2.886	20987	29	23.340	3.023	21059	8	1.829	5.161	21131	14	10.804	6.165
20844	19	2.588	1.774	20916	25	13.990	2.650	20988	9	24.368	3.094	21060	27	2.030	5.235	21132	19	11.218	6.904
20845	11	3.806	1.815	20917	8	14.466	2.453	20989	27	24.498	3.575	21061	15	2.963	5.540	21133	13	11.560	6.690
20846	9	3.980	1.790	20918	32	15.157	2.722	20990	9	24.891	3.520	21062	10	3.003	5.314	21134	23	11.750	6.490
20847	27	4.320	1.756	20919	22	15.262	2.504	20991	10	25.054	3.087	21063	9	3.097	5.026	21135	11	11.974	6.881
20848	19	4.688	1.318	20920	9	15.286	2.540	20992	9	25.574	3.813	21064	12	3.271	5.812	21136	10	12.192	6.536
20849	10	4.900	1.218	20921	8	15.450	2.541	20993	16	0.490	4.133	21065	19	3.446	5.084	21137	22	12.700	6.737
20850	14	5.909	1.462	20922	10	15.918	2.449	20994	20	2.193	4.372	21066	11	3.924	5.352	21138	10	12.964	6.656
20851	19	6.337	1.930	20923	9	16.156	2.537	20995	30	3.111	4.254	21067	27	4.355	5.714	21139	8	14.800	6.840
20852	9	7.689	1.652	20924	13	16.386	2.333	20996	20	3.136	4.438	21068	25	4.438	5.066	21140	8	15.430	6.417
20853	10	8.440	1.088	20925	12	16.746	2.112	20997	12	3.210	4.033	21069	8	4.858	5.636	21141	27	15.638	6.285
20854	10	8.746	1.919	20926	9	17.036	2.850	20998	10	5.925	4.445	21070	10	5.318	5.790	21142	11	15.897	6.418
20855	11	8.956	1.534	20927	13	17.192	2.959	20999	13	6.071	4.830	21071	10	5.485	5.837	21143	27	16.164	6.924
20856	23	9.590	1.422	20928	12	17.294	2.347	21000	10	6.646	4.343	21072	9	5.497	5.227	21144	10	17.646	6.055
20857	12	10.656	1.766	20929	17	18.070	2.240	21001	10	7.280	4.685	21073	21	6.383	5.346	21145	8	17.829	6.704
20858	16	10.655	1.360	20930	11	19.131	2.222	21002	13	7.720	4.832	21074	20	6.432	5.147	21146	10	17.875	6.044
20859	11	10.861	1.496	20931	8	20.486	2.177	21003	10	7.784	4.674	21075	9	6.725	5.437	21147	23	17.914	6.954
20860	32	11.164	1.254	20932	8	21.165	2.028	21004	10	8.580	4.730	21076	10	6.804	5.106	21148	10	18.050	6.603
20861	32	11.588	1.720	20933	19	22.068	2.439	21005	9	9.214	4.444	21077	14	7.366	5.395	21149	8	18.598	6.400
20862	10	11.822	1.148	20934	10	22.294	2.520	21006	21	9.436	4.380	21078	22	7.508	5.452	21150	8	19.702	6.362
20863	9	12.800	1.509	20935	8	22.848	2.876	21007	11	9.616	4.420	21079	8	7.492	5.198	21151	32	20.279	6.615
20864	20	12.955	1.112	20936	18	23.771	2.598	21008	19	9.656	4.407	21080	34	7.920	5.452	21152	35	20.600	6.082
20865	14	13.300	1.175	20937	16	24.616	2.587	21009	10	10.065	4.473	21081	12	8.617	5.186	21153	34	21.981	6.728
20866	10	13.328	1.965	20938	16	24.680	2.766	21010	22	10.212	4.106	21082	20	9.136	5.576	21154	35	22.738	6.882
20867	15	14.334	1.852	20939	31	1.100	3.953	21011	8	10.315	4.986	21083	30	9.463	5.124	21155			



21164	12	0-806	7-616	21236	17	6-358	8-734	21308	14	7-368	9-157	21380	10	8-365	10-628	21452	8	12-230	11-276
21165	8	1-720	7-992	21237	12	6-407	8-364	21309	16	7-462	9-392	21381	34	8-750	10-978	21453	11	13-066	11-195
21166	15	1-788	7-852	21238	11	6-450	8-918	21310	10	7-558	9-071	21382	8	8-950	10-620	21454	10	13-258	11-212
21167	8	1-892	7-386	21239	20	6-538	8-590	21311	11	8-504	9-860	21383	8	9-569	10-109	21455	10	14-176	11-788
21168	8	2-264	7-356	21240	17	6-765	8-946	21312	11	9-354	9-337	21384	19	10-034	10-262	21456	14	14-490	11-580
21169	8	2-900	7-494	21241	31	7-014	8-621	21313*	37	9-536	9-840	21385	19	10-602	10-880	21457	8	14-507	11-530
21170	20	3-676	7-832	21242	8	7-724	8-725	21314	9	9-833	9-730	21386	27	10-880	10-161	21458	12	14-511	11-690
21171	19	4-028	7-187	21243	27	7-861	8-720	21315	8	10-376	9-470	21387	8	11-096	10-364	21459	34	14-521	11-470
21172	15	5-060	7-778	21244	8	7-998	8-275	21316	26	10-773	9-490	21388	9	11-476	10-481	21460	8	14-540	11-725
21173	15	5-171	7-354	21245	9	8-556	8-208	21317	22	10-796	9-101	21389	10	11-660	10-482	21461	25	14-607	11-509
21174	11	6-150	7-616	21246	27	8-770	8-704	21318	8	11-102	9-653	21390	12	11-838	10-330	21462	10	14-806	11-438
21175	10	6-296	7-734	21247	13	8-998	8-688	21319	8	11-216	9-692	21391	13	12-064	10-576	21463	26	14-953	11-920
21176	34	6-890	7-044	21248	9	10-106	8-186	21320	15	11-248	9-267	21392	14	12-630	10-436	21464	22	15-094	11-037
21177*	47	7-464	7-405	21249	18	10-830	8-205	21321	23	11-756	9-718	21393	10	13-890	10-508	21465	8	15-774	11-237
21178	22	7-682	7-548	21250	11	10-856	8-120	21322	9	13-334	9-514	21394	16	14-116	10-034	21466	10	15-782	11-154
21179	26	7-816	7-562	21251	36	11-584	8-812	21323	12	13-678	9-330	21395	27	14-796	10-323	21467	13	15-849	11-074
21180	25	7-914	7-172	21252	33	11-689	8-766	21324	12	13-764	9-691	21396	8	14-810	10-418	21468	26	16-122	11-526
21181	10	8-064	7-269	21253	22	11-878	8-573	21325	11	13-674	9-284	21397	8	14-884	10-456	21469	17	16-183	11-849
21182	19	8-108	7-859	21254	11	12-364	8-294	21326	16	13-888	9-221	21398	30	15-386	10-760	21470	22	17-299	11-814
21183	12	8-306	7-707	21255	8	12-568	8-950	21327	15	14-264	9-372	21399	10	15-453	10-046	21471	21	18-860	11-372
21184	10	8-360	7-047	21256	8	12-685	8-988	21328	12	15-006	9-657	21400	19	15-489	10-678	21472	8	18-876	11-702
21185	30	8-575	7-754	21257	37	12-736	8-480	21329	30	15-662	9-670	21401	15	15-658	10-920	21473	28	20-054	11-998
21186	10	8-856	7-342	21258	12	13-430	8-642	21330	28	16-340	9-294	21402	9	16-360	10-172	21474	10	20-410	11-921
21187	21	9-920	7-406	21259	10	13-619	8-762	21331	21	16-368	9-772	21403	12	16-845	10-191	21475	8	20-528	11-844
21188	8	10-142	7-440	21260	37	13-858	8-920	21332	28	16-888	9-570	21404	10	17-144	10-354	21476	10	20-666	11-122
21189	17	11-008	7-912	21261	23	14-556	8-655	21333	23	17-148	9-978	21405	10	17-249	10-540	21477	10	20-911	11-370
21190	13	11-121	7-658	21262*	46	14-716	8-702	21334	9	17-164	9-767	21406	14	18-186	10-324	21478	10	21-080	11-324
21191	28	11-352	7-027	21263	36	14-930	8-890	21335	8	17-047	9-204	21407	10	18-398	10-410	21479	14	22-002	11-328
21192	12	11-658	7-745	21264	14	15-284	8-801	21336	8	18-515	9-845	21408	12	18-436	10-642	21480	18	23-400	11-841
21193	24	11-896	7-826	21265	14	15-876	8-812	21337	8	19-462	9-840	21409	12	18-766	10-369	21481	8	23-663	11-833
21194	14	12-014	7-722	21266	31	16-418	8-062	21338	8	19-690	9-748	21410	8	19-476	10-501	21482	20	23-872	11-788
21195	10	12-164	7-864	21267	10	17-050	8-260	21339	15	19-786	9-014	21411	12	20-395	10-412	21483	8	23-919	11-611
21196	10	12-420	7-686	21268	12	17-340	8-971	21340*	29	19-935	9-304	21412	14	22-376	10-337	21484	18	0-012	12-950
21197	22	12-662	7-011	21269	14	17-473	8-160	21341	23	20-006	9-030	21413	8	22-508	10-776	21485	23	1-070	12-436
21198	8	12-950	7-326	21270	33	17-794	8-463	21342	24	20-860	9-302	21414	10	22-872	10-938	21486	25	1-313	12-545
21199	26	13-622	7-067	21271	21	17-850	8-104	21343	22	21-918	9-774	21415	21	22-906	10-660	21487	13	1-469	12-720
21200	14	13-736	7-590	21272	31	18-832	8-652	21344	36	22-303	9-466	21416	9	22-966	10-567	21488	10	2-386	12-835
21201	34	14-345	7-685	21273	18	19-112	8-981	21345	12	22-549	9-941	21417	12	23-049	10-108	21489	25	2-412	12-696
21202	16	15-062	7-248	21274	19	19-905	8-314	21346	13	22-554	9-780	21418	10	23-479	10-510	21490	12	2-502	12-489
21203	34	15-382	7-644	21275	15	19-930	8-732	21347	27	23-100	9-448	21419	15	23-990	10-845	21491	10	2-844	12-335
21204	26	15-446	7-639	21276	8	19-738	8-971	21348	13	23-434	9-650	21420	21	24-599	10-764	21492	10	3-146	12-557
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21206	10	17-904	7-034	21278	18	20-266	8-494	21350	8	23-895	9-975	21422	10	25-080	10-164	21494	13	3-654	12-516
21207	17	18-934	7-850	21279	29	20-350	8-004	21351	11	24-182	9-651	21423	14	25-198	10-844	21495	15	3-965	12-570
21208	34	19-090	7-406	21280	10	20-431	8-204	21352	8	24-501	9-788	21424	14	0-820	11-826	21496	9	4-112	12-404
21209	14	19-283	7-538	21281	24	20-601	8-674	21353	15	24-926	9-511	21425	23	1-068	11-407	21497	10	4-577	12-614
21210	11	19-443	7-310	21282	10	21-328	8-740	21354	10	25-506	9-820	21426	13	1-256	11-914	21498	17	4-761	12-946
21211	32	19-736	7-373	21283	26	21-691	8-606	21355	15	0-402	10-232	21427	10	1-276	11-436	21499	10	4-800	12-947
21212	10	19-850	7-025	21284	25	22-318	8-522	21356	12	0-529	10-114	21428	14	1-520	11-019	21500	18	5-254	12-246
21213	20	20-770	7-734	21285	33	22-712	8-946	21357	8	0-713	10-072	21429	12	2-238	11-697	21501	11	6-069	12-588
21214	11	21-636	7-999	21286	21	22-764	8-270	21358	37	0-715	10-870	21430	11	2-830	11-374	21502	34	6-637	12-282
21215	8	22-624	7-433	21287	13	23-612	8-934	21359	9	1-290	10-733	21431	10	3-218	11-409	21503	8	6-693	12-844
21216	8	22-870	7-616	21288*	41	23-772	8-626	21360	12	1-508	10-397	21432	10	3-706	11-280	21504	15	7-060	12-180
21217	24	23-022	7-950	21289	8	23-818	8-504	21361	8	1-744	10-468	21433	13	3-892	11-621	21505	24	7-110	12-524
21218*	35	23-937	7-094	21290	8	24-356	8-701	21362	8	2-035	10-743	21434	23	4-184	11-088	21506	27	7-270	12-789
21219	24	24-670	7-628	21291	8	24-927	8-938	21363	19	2-439	10-070	21435	13	6-045	11-954	21507	22	7-486	12-920
21220	19	24-956	7-806	21292	9	25-324	8-350	21364	11	2-558	10-146	21436	30	7-056	11-280	21508	28	7-576	12-578
21221	18	0-508	8-862	21293	18	1-244	9-865	21365*	36	2-672	10-570	21437	10	7-657	11-315	21509	8	7-792	12-895
21222	22	0-616	8-248	21294	12	2-508	9-173	21366*	68	2-981	10-448	21438	13	7-666	11-689	21510	9	8-864	12-552
21223	32	1-655	8-926	21295	17	2-788	9-264	21367	8	3-670	10-796	21439	10	8-163	11-554	21511	9	9-272	12-069
21224	10	1-800	8-420	21296	9	3-127	9-250	21368	28	4-200	10-794	21440	34	9-045	11-190	21512	10	9-494	12-384
21225	8	1-834	8-946	21297	23	4-094	9-284	21369	8	5-484	10-474	21441	8	9-434	11-512	21513	22	9-820	12-717
21226	8	2-162	8-748	21298	15	4-464	9-937	21370	8	5-677	10-510	21442	31	9-507	11-316	21514	13	10-354	12-848</



21524	9	13.920	12.148	21596	13	17.505	13.355	21668	34	21.114	14.586	21740	8	24.955	15.198	21812	21	1.180	17.759
21525	10	14.196	12.186	21597	9	17.707	13.987	21669	9	21.892	14.201	21741	10	25.900	15.872	21813	9	1.440	17.858
21526	19	14.774	12.916	21598	23	17.723	13.800	21670	9	22.101	14.303	21742	34	25.907	15.572	21814	10	2.010	17.320
21527	28	15.580	12.654	21599	23	18.464	13.500	21671	14	22.101	14.460	21743	30	25.915	15.516	21815	11	2.026	17.740
21528	9	16.067	12.314	21600	13	18.517	13.640	21672	9	23.849	14.068	21744	9	1.564	16.212	21816	10	2.140	17.046
21529	33	16.169	12.974	21601	12	18.884	13.006	21673	10	24.188	14.926	21745	10	1.900	16.050	21817	32	2.431	17.660
21530	16	16.314	12.499	21602	13	19.127	13.376	21674	12	0.500	15.696	21746	24	2.008	16.960	21818	8	3.104	17.944
21531	25	16.820	12.738	21603	19	19.414	13.559	21675	8	0.600	15.860	21747	28	2.022	16.566	21819	9	3.296	17.114
21532	8	17.736	12.499	21604	10	19.676	13.166	21676	8	0.954	15.935	21748	12	2.215	16.496	21820	16	3.569	17.466
21533	10	17.899	12.514	21605	28	20.103	13.480	21677	11	1.546	15.058	21749	13	2.357	16.604	21821	8	3.641	17.184
21534	30	18.560	12.786	21606	12	20.704	13.838	21678	34	2.112	15.816	21750	34	2.374	16.852	21822	31	3.844	17.139
21535	13	18.816	12.126	21607	12	21.619	13.400	21679	9	2.434	15.686	21751	8	2.596	16.978	21823	10	4.052	17.122
21536	29	19.154	12.343	21608	22	21.974	13.175	21680	8	2.676	15.506	21752	8	3.368	16.855	21824	8	4.601	17.800
21537	10	19.444	12.436	21609	23	22.265	13.150	21681	9	2.720	15.836	21753	23	3.449	16.674	21825	10	5.092	17.819
21538	10	19.634	12.606	21610	8	22.694	13.186	21682*	35	3.618	15.782	21754	10	3.915	16.552	21826	14	5.136	17.228
21539	10	19.773	12.058	21611	8	22.714	13.506	21683	29	3.896	15.100	21755	24	5.479	16.602	21827	11	5.156	17.562
21540	26	19.936	12.280	21612	26	23.405	13.626	21684	10	3.936	15.661	21756	10	6.592	16.200	21828	9	5.534	17.529
21541	36	20.720	12.984	21613	10	23.590	13.155	21685	8	4.280	15.796	21757	10	6.749	16.930	21829	21	5.785	17.246
21542	13	20.990	12.324	21614	16	23.648	13.466	21686	11	4.300	15.124	21758	10	6.915	16.645	21830	11	5.858	17.120
21543*	37	21.014	12.166	21615	9	24.475	13.412	21687	12	4.326	15.970	21759	13	6.918	16.654	21831	10	6.152	17.714
21544	18	21.220	12.173	21616	19	25.114	13.044	21688*	42	5.026	15.396	21760	13	7.008	16.954	21832	8	7.391	17.988
21545	10	21.338	12.512	21617	25	25.869	13.082	21689	9	5.120	15.642	21761	17	7.096	16.480	21833	18	8.088	17.468
21546	35	21.774	12.910	21618	11	0.275	14.094	21690	22	5.170	15.518	21762	12	7.238	16.197	21834	19	8.120	17.384
21547	10	21.930	12.890	21619	8	0.292	14.860	21691	10	5.193	15.269	21763	29	7.255	16.100	21835	24	8.705	17.430
21548	11	22.918	12.651	21620	11	1.245	14.444	21692	9	5.361	13.356	21764	10	7.380	16.545	21836	24	8.736	17.462
21549	9	23.157	12.568	21621	29	1.332	14.840	21693	19	6.571	15.336	21765	27	8.210	16.850	21837	9	9.104	17.305
21550	22	23.629	12.075	21622	14	1.684	14.437	21694	8	6.757	15.725	21766	13	8.714	16.560	21838	10	9.325	17.725
21551	10	23.740	12.198	21623	20	1.970	14.344	21695	13	7.034	15.354	21767	19	8.972	16.200	21839	8	9.384	17.117
21552	16	23.756	12.525	21624	27	2.900	14.994	21696	10	7.182	15.120	21768	11	8.981	16.228	21840	8	9.440	17.478
21553	32	24.162	12.300	21625	29	3.288	14.836	21697	10	8.788	15.063	21769	9	9.066	16.210	21841	28	9.698	17.867
21554*	40	24.266	12.136	21626	13	3.406	14.369	21698	8	9.346	15.846	21770	10	9.661	16.914	21842	19	9.761	17.260
21555*	38	24.375	12.568	21627	8	3.456	14.442	21699	8	9.710	15.636	21771	34	9.862	16.135	21843	12	11.100	17.859
21556	22	24.582	12.734	21628	8	3.526	14.874	21700	11	9.883	15.736	21772	9	9.871	16.844	21844	10	11.164	17.212
21557	10	24.796	12.203	21629	8	3.934	14.517	21701	13	10.019	15.726	21773	10	10.466	16.866	21845	27	11.658	17.788
21558	8	0.010	13.935	21630	11	4.535	14.223	21702	8	10.696	15.350	21774	8	11.736	16.190	21846	9	12.272	17.100
21559	35	0.181	13.902	21631	24	4.698	14.958	21703	34	10.746	15.584	21775	29	11.836	16.874	21847	8	12.364	17.905
21560	28	1.337	13.642	21632	8	5.394	14.180	21704	8	11.470	15.776	21776	12	12.126	16.098	21848	27	12.427	17.566
21561	10	1.380	13.738	21633	11	5.618	14.832	21705	10	12.028	15.797	21777	9	12.234	16.420	21849	10	12.461	17.021
21562	27	2.031	13.814	21634	8	6.339	14.880	21706	8	12.346	15.768	21778	10	12.424	16.216	21850	9	12.908	17.295
21563	21	2.044	13.085	21635	12	6.444	14.142	21707	10	12.420	15.083	21779	32	12.795	16.861	21851	13	12.952	17.721
21564	22	2.544	13.492	21636	23	7.059	14.026	21708	11	12.614	15.242	21780	12	13.082	16.090	21852	10	12.999	17.188
21565	10	3.075	13.286	21637	20	7.607	14.771	21709	19	12.627	15.072	21781	19	13.541	16.094	21853	15	13.161	17.766
21566	14	3.147	13.971	21638	13	8.044	14.851	21710	23	12.725	15.066	21782	22	13.558	16.802	21854	12	13.208	17.977
21567	31	3.426	13.941	21639	17	8.961	14.368	21711	8	12.896	15.026	21783	9	13.666	16.784	21855	28	13.426	17.551
21568	12	3.614	13.836	21640	22	9.266	14.222	21712	25	13.238	15.212	21784	8	13.855	16.539	21856	22	13.428	17.196
21569	11	3.625	13.116	21641	12	9.284	14.035	21713	9	13.278	15.899	21785	17	14.122	16.424	21857	14	13.666	17.053
21570	11	3.780	13.794	21642	9	9.937	14.462	21714	8	14.630	15.700	21786	8	14.278	16.836	21858	22	14.348	17.650
21571	36	3.856	13.256	21643	11	10.452	14.952	21715	20	14.753	15.064	21787	9	15.058	16.790	21859	28	14.535	17.256
21572	25	4.722	13.575	21644	11	10.956	14.990	21716	8	15.055	15.864	21788	34	15.146	16.786	21860	8	14.778	17.500
21573	8	4.820	13.328	21645	8	11.200	14.020	21717	8	15.086	15.588	21789*	40	16.248	16.289	21861	16	14.804	17.843
21574	9	5.018	13.322	21646	28	11.791	14.896	21718	25	16.227	15.464	21790	20	16.475	16.488	21862	9	15.416	17.990
21575	18	5.083	13.672	21647	12	12.405	14.816	21719	12	16.932	15.894	21791	25	17.300	16.654	21863	9	15.418	17.874
21576	10	5.394	13.073	21648	10	12.585	14.995	21720	10	17.073	15.287	21792*	49	17.375	16.300	21864	23	15.723	17.244
21577	21	5.926	13.956	21649	11	13.624	14.459	21721	9	17.495	15.158	21793	12	18.132	16.382	21865	12	15.832	17.614
21578	10	6.740	13.828	21650	18	13.676	14.468	21722	9	17.757	15.126	21794	11	18.500	16.100	21866	23	16.136	17.814
21579	8	7.240	13.429	21651	18	13.774	14.684	21723	13	17.835	15.610	21795	8	18.891	16.974	21867	17	16.425	17.388
21580	16	8.660	13.850	21652	33	15.458	14.805	21724	8	18.318	15.458	21796	8	18.914	16.766	21868	14	17.328	17.432
21581	10	9.002	13.626	21653	8	15.736	14.466	21725	10	19.285	15.456	21797	25	18.979	16.276	21869	8	17.377	17.122
21582	13	9.338	13.698	21654*	36	15.779	14.405	21726	9	19.873	15.720	21798	8	19.422	16.592	21870	10	18.652	17.846
21583	10	9.692	13.025	21655	29	16.114	14.412	21727	8	20.048	15.621	21799	8	19.656	16.446	21871	28	18.690	17.655
21584	10	10.866	13.947	21656	9	16.475	14.072	21728	20	20.074	15.905	21800	16	19.894	16.342	21872	25	19.786	17.876
21585	10	11.440	13.960	21657	15	16.489	14.623	21729	8	20.596	15.154	21801	28	20.653	16.432	21873	15	19.814	17.542
21586	10	11.499	13.640	21658	1														



21884	10	23.480	17.412	21956	10	17.691	18.904	22028	10	22.375	19.825	22100	14	1.744	21.078	22172	12	5.132	22.200
21885	12	23.783	17.889	21957	8	18.294	18.644	22029	14	22.438	19.784	22101	10	1.886	21.428	22173	8	5.148	22.816
21886	10	23.820	17.868	21958	16	18.338	18.516	22030	20	22.676	19.644	22102	32	2.670	21.722	22174	15	5.800	22.756
21887	8	24.650	17.650	21959	30	18.684	18.804	22031	8	24.294	19.308	22103	16	2.792	21.889	22175	34	5.919	22.654
21888	23	25.341	17.965	21960	13	19.375	18.418	22032	13	24.656	19.079	22104*	44	3.893	21.104	22176	20	6.480	22.770
21889	13	25.456	17.514	21961	26	19.515	18.515	22033	10	24.832	19.236	22105	8	4.662	21.190	22177	8	6.656	22.154
21890	8	0.112	18.552	21962	11	20.054	18.650	22034	10	25.798	19.601	22106	16	5.311	21.701	22178	19	6.844	22.330
21891	34	0.164	18.336	21963	32	21.005	18.166	22035	8	0.584	20.716	22107	18	5.624	21.732	22179	21	7.666	22.108
21892	11	0.376	18.700	21964	18	21.169	18.872	22036	20	1.654	20.554	22108	8	5.849	21.898	22180	23	8.354	22.222
21893	9	0.427	18.903	21965	8	22.124	18.346	22037	30	1.749	20.828	22109	8	6.085	21.200	22181	13	8.768	22.584
21894	21	0.477	18.244	21966	11	22.340	18.004	22038	11	3.078	20.430	22110	9	7.741	21.002	22182	17	9.004	22.282
21895	19	0.521	18.510	21967	8	23.732	18.364	22039	8	4.014	20.362	22111*	37	7.750	21.929	22183	8	9.550	22.386
21896	30	0.586	18.135	21968	19	25.300	18.726	22040	14	4.608	20.396	22112	10	7.844	21.030	22184	8	9.834	22.346
21897	9	1.506	18.859	21969	13	25.763	18.698	22041	11	4.966	20.613	22113	34	8.529	21.714	22185	14	10.314	22.900
21898	23	2.458	18.833	21970	10	0.960	19.418	22042	10	5.009	20.190	22114	8	8.610	21.970	22186	11	11.354	22.549
21899	8	2.640	18.191	21971	14	0.996	19.279	22043	11	5.140	20.010	22115	12	8.716	21.062	22187	13	11.555	22.234
21900	15	2.974	18.190	21972	12	1.214	19.675	22044	13	5.225	20.885	22116	8	8.772	21.057	22188	10	11.557	22.730
21901	14	3.245	18.434	21973	8	1.250	19.413	22045	22	5.464	20.758	22117	33	9.074	21.650	22189	10	12.058	22.782
21902	8	3.498	18.653	21974	10	2.040	19.177	22046	12	5.794	20.086	22118	38	9.264	21.154	22190	13	12.330	22.332
21903	10	3.723	18.567	21975	10	2.495	19.434	22047	8	6.415	20.362	22119*	47	9.763	21.896	22191	10	12.412	22.780
21904	25	3.908	18.431	21976	8	2.950	19.890	22048	8	6.529	20.926	22120	10	9.812	21.111	22192	12	12.764	22.556
21905	9	4.064	18.299	21977	8	2.950	19.658	22049	8	6.554	20.056	22121	31	10.462	21.638	22193	11	13.070	22.916
21906	13	4.380	18.774	21978	12	3.630	19.554	22050	8	7.034	20.665	22122	8	10.725	21.955	22194	17	13.434	22.374
21907	11	5.174	18.970	21979	8	4.050	19.992	22051	13	7.235	20.341	22123	9	10.815	21.575	22195	8	13.572	22.526
21908	8	5.325	18.541	21980	30	4.170	19.672	22052	31	7.421	20.140	22124	20	11.177	21.142	22196	8	14.046	22.790
21909	12	5.374	18.248	21981	32	4.203	19.488	22053	12	7.500	20.757	22125	9	11.374	21.254	22197	8	14.387	22.962
21910	9	5.498	18.090	21982	37	4.266	19.939	22054	25	7.550	20.194	22126	8	11.608	21.086	22198	8	14.538	22.616
21911	11	5.711	18.400	21983	30	4.394	19.566	22055	11	7.824	20.390	22127	11	12.082	21.591	22199	13	14.630	22.844
21912	13	5.898	18.690	21984	12	4.972	19.039	22056	28	7.893	20.550	22128	12	12.381	21.113	22200	21	14.708	22.464
21913	8	6.323	18.080	21985	12	5.496	19.710	22057	12	8.586	20.590	22129	9	12.664	21.634	22201	33	14.906	22.614
21914	8	6.336	18.488	21986	24	5.700	19.624	22058	17	8.868	20.618	22130	25	12.951	21.628	22202	8	15.140	22.530
21915	30	6.381	18.406	21987	16	5.735	19.137	22059	13	9.000	20.776	22131	23	13.470	21.630	22203	18	15.268	22.428
21916	9	6.634	18.254	21988	25	5.840	19.616	22060	10	10.346	20.086	22132	8	13.584	21.810	22204	29	15.372	22.984
21917	17	6.702	18.689	21989	21	6.298	19.474	22061	10	10.797	20.352	22133	18	13.642	21.582	22205	8	15.703	22.960
21918	15	7.369	18.076	21990	8	6.442	19.866	22062	8	11.030	20.426	22134	21	13.800	21.848	22206	12	16.324	22.504
21919	12	7.710	18.080	21991	10	7.088	19.866	22063	8	11.082	20.227	22135	23	13.940	21.470	22207	11	16.606	22.565
21920	8	7.746	18.531	21992	10	7.874	19.126	22064	12	11.482	20.510	22136	13	14.050	21.258	22208	8	18.018	22.910
21921	13	8.375	18.395	21993	9	8.454	19.145	22065	33	11.805	20.540	22137	16	14.295	21.940	22209	20	18.159	22.096
21922	20	8.536	18.075	21994	21	8.854	19.234	22066	8	11.872	20.476	22138	13	14.522	21.734	22210	22	19.135	22.004
21923	16	8.644	18.528	21995	33	8.946	19.590	22067	12	12.036	20.376	22139	18	14.843	21.719	22211	12	19.828	22.829
21924	8	9.131	18.826	21996	11	9.046	19.664	22068	11	12.229	20.000	22140	9	15.077	21.944	22212	8	19.989	22.536
21925	12	9.404	18.825	21997	21	9.414	19.532	22069	8	12.322	20.944	22141	26	15.677	21.306	22213	11	20.864	22.574
21926	9	10.297	18.346	21998	16	9.950	19.432	22070	9	12.650	20.155	22142	22	15.941	21.666	22214	22	20.954	22.428
21927	23	10.355	18.944	21999	23	10.562	19.346	22071	10	12.925	20.574	22143	9	16.035	21.501	22215	32	21.386	22.204
21928	12	10.796	18.355	22000	9	10.596	19.458	22072	8	12.930	20.564	22144	34	16.116	21.258	22216	22	22.406	22.402
21929	13	10.990	18.994	22001	10	11.546	19.296	22073	24	14.070	20.712	22145	26	16.669	21.774	22217	8	24.430	22.325
21930	10	11.114	18.577	22002	8	12.354	19.817	22074	10	15.182	20.025	22146	22	16.950	21.590	22218	33	24.649	22.126
21931	10	11.192	18.462	22003	11	12.564	19.753	22075	10	15.558	20.508	22147	10	17.558	21.821	22219	8	24.880	22.194
21932	13	11.303	18.751	22004	12	13.433	19.265	22076	10	15.656	20.643	22148	17	18.131	21.394	22220	32	25.326	22.920
21933	38	11.450	18.161	22005	24	13.668	19.975	22077	9	15.764	20.441	22149	11	19.574	21.734	22221	10	1.972	23.090
21934	10	11.464	18.976	22006	33	13.795	19.300	22078	15	15.816	20.010	22150	16	19.682	21.360	22222	8	2.585	23.441
21935	25	11.622	18.232	22007	10	14.097	19.980	22079	9	15.882	20.270	22151	8	20.129	21.390	22223	17	2.746	23.328
21936	22	11.644	18.206	22008	8	14.390	19.100	22080	8	16.653	20.404	22152	13	21.636	21.922	22224	34	2.932	23.401
21937	8	11.688	18.581	22009*	33	14.512	19.901	22081	23	18.746	20.294	22153	11	21.698	21.088	22225	20	3.152	23.903
21938	8	11.745	18.450	22010	8	14.744	19.966	22082	26	20.472	20.920	22154	18	22.458	21.564	22226	35	3.479	23.358
21939	10	12.432	18.114	22011	8	14.966	19.242	22083	10	20.887	20.306	22155	10	22.922	21.648	22227	25	4.191	23.226
21940	8	12.456	18.114	22012	9	15.652	19.982	22084	11	21.094	20.304	22156	20	24.026	21.650	22228	23	5.308	23.496
21941	8	12.476	18.058	22013	12	15.654	19.416	22085	9	21.524	20.450	22157	22	25.280	21.652	22229	11	5.340	23.362
21942	16	12.793	18.830	22014	12	15.700	19.672	22086	8	21.574	20.214	22158	16	25.868	21.433	22230	10	5.674	23.626
21943	12	12.885	18.090	22015	15	17.082	19.495	22087	8	22.203	20.844	22159	8	25.908	21.188	22231	18	6.075	23.574
21944	12	13.250	18.892	22016	17	17.094	19.501	22088	12	23.604	20.570	22160	30	0.406	22.160	22232	36	6.808	23.902
21945	9	13.952	18.602	22017	22	17.291	19.371	22089	18	23.937	20.540	22161	8	0.926	22.196	22233	10	6.864	23.712
21946	8	14.462	18.300	22018	9														



22244	8	11.816	23.627	22316	10	7.444	24.698	22388	12	12.202	35.190	22470	15	18.831	0.650	22542	18	13.102	2.894
22245	18	11.964	23.350	22317	11	7.954	24.690	22389	8	12.240	25.730	22471	16	18.942	0.440	22543	14	14.180	2.246
22246	17	11.966	23.680	22318	8	7.956	24.784	22390	10	12.635	25.210	22472	15	19.054	0.334	22544	8	14.979	2.073
22247	8	12.138	23.201	22319	20	8.102	24.190	22391	8	12.958	25.346	22473	10	19.206	0.806	22545	37	15.144	2.911
22248	10	12.344	23.542	22320	17	8.135	24.300	22392	10	13.010	25.359	22474	10	19.662	0.922	22546	24	15.616	2.989
22249	11	12.442	23.985	22321	14	8.318	24.176	22393	24	13.076	25.661	22475	10	20.362	0.852	22547	33	16.380	2.118
22250	8	12.486	23.775	22322	11	8.522	24.549	22394	12	13.814	25.731	22476	11	20.792	0.882	22548	11	16.954	2.097
22251	36	12.668	23.149	22323	8	10.301	24.720	22395	27	14.155	25.710	22477	9	20.925	0.370	22549	13	17.235	2.371
22252	25	12.698	23.359	22324	9	10.324	24.426	22396	10	14.213	25.894	22478*	46	20.942	0.979	22550	31	17.451	2.575
22253	9	12.773	23.112	22325	11	10.746	24.645	22397	13	14.504	25.817	22479	15	21.686	0.921	22551	15	17.726	2.052
22254	8	12.900	23.920	22326	35	11.078	24.022	22398	27	14.658	25.435	22480	14	22.672	0.872	22552	8	17.902	2.623
22255	8	13.018	23.980	22327	8	11.244	24.585	22399	14	14.830	25.890	22481	30	22.898	0.238	22553	21	18.542	2.811
22256	9	13.066	23.902	22328*	45	11.344	24.330	22400	11	15.472	25.684	22482	8	23.177	0.882	22554	20	19.775	2.067
22257	10	13.312	23.041	22329*	45	11.428	24.022	22401	44	15.926	25.474	22483	19	24.148	0.130	22555	24	20.219	2.185
22258	10	13.416	23.180	22330	22	11.624	24.264	22402	11	16.594	25.366	22484	26	25.048	0.300	22556	9	20.587	2.506
22259	28	14.068	23.136	22331	10	12.385	24.039	22403	22	16.741	25.156	22485	10	25.576	0.913	22557	23	20.638	2.806
22260	12	14.086	23.118	22332	24	12.398	24.036	22404	11	17.508	25.280	22486*	57	1.584	1.220	22558	11	21.799	2.522
22261	12	14.152	23.767	22333	19	12.822	24.974	22405	12	18.258	25.402	22487*	42	2.662	1.239	22559	9	24.304	2.194
22262	8	14.500	23.585	22334	23	13.121	24.066	22406	15	19.216	25.180	22488	34	2.830	1.820	22560	24	24.306	2.606
22263*	44	14.507	23.754	22335	21	13.518	24.065	22407	32	19.296	25.540	22489	16	3.280	1.261	22561	24	25.912	2.085
22264	33	15.505	23.426	22336	10	13.546	24.034	22408	15	19.517	25.231	22490	13	5.355	1.024	22562	10	0.432	3.717
22265	17	16.215	23.035	22337	10	14.076	24.092	22409	11	19.902	25.072	22491	11	5.834	1.334	22563	8	1.824	3.969
22266	15	16.504	23.268	22338	8	14.870	24.140	22410	8	21.070	25.253	22492	8	7.622	1.850	22564	29	2.283	3.448
22267	12	16.691	23.556	22339	12	15.022	24.258	22411	16	21.408	25.620	22493	12	8.018	1.930	22565	10	2.680	3.389
22268	30	16.808	23.742	22340	8	15.240	24.624	22412	8	21.478	25.904	22494	9	8.100	1.520	22566	11	3.364	3.675
22269	8	16.948	23.198	22341	30	15.599	24.016	22413	31	21.504	25.351	22495	12	9.482	1.738	22567	14	4.059	3.750
22270	8	17.308	23.380	22342	17	16.900	24.164	22414	17	22.608	25.424	22496	19	9.498	1.424	22568	21	5.822	3.611
22271	31	17.431	23.597	22343	8	18.054	24.284	22415	21	22.950	25.848	22497	32	9.748	1.469	22569	30	6.044	3.187
22272	11	17.568	23.551	22344	20	18.600	24.434	22416	12	23.549	25.991	22498	9	9.882	1.998	22570	26	6.455	3.533
22273	20	18.005	23.808	22345	8	18.694	24.149					22499	21	9.900	1.378	22571	25	6.480	3.977
22274	13	18.084	23.080	22346	8	20.066	24.107					22500	21	10.310	1.747	22572	11	6.644	3.948
22275	8	18.116	23.772	22347	10	20.110	24.488					22501	9	10.618	1.516	22573	36	8.248	3.510
22276	8	18.206	23.026	22348	11	20.420	24.490					22502	10	10.742	1.601	22574	12	8.294	3.858
22277	19	18.664	23.555	22349	32	20.425	24.146					22503	18	11.624	1.964	22575	13	8.436	3.024
22278	16	18.694	23.000	22350	12	20.562	24.731					22504	12	12.464	1.646	22576	10	11.126	3.402
22279	33	18.731	23.024	22351	8	20.649	24.788					22505	23	13.197	1.219	22577	18	11.228	3.563
22280	14	18.915	23.620	22352	16	21.772	24.802					22506	14	13.216	1.606	22578	23	11.936	3.654
22281	11	20.063	23.770	22353	9	21.831	24.556					22507	10	14.494	1.982	22579	25	12.076	3.644
22282	36	20.231	23.397	22354	12	23.224	24.276					22508	8	15.070	1.784	22580	23	13.150	3.614
22283	8	20.670	23.450	22355	8	24.490	24.031					22509	18	15.656	1.783	22581	9	15.012	3.451
22284	10	20.676	23.728	22356	10	25.104	24.530					22510	20	15.730	1.576	22582*	42	15.455	3.575
22285	9	20.694	23.850	22357	8	25.152	24.310					22511	31	16.942	1.820	22583	15	15.820	3.839
22286	11	22.320	23.554	22358	9	25.678	24.160					22512	10	18.457	1.148	22584	23	16.182	3.431
22287	8	23.917	23.840	22359	23	0.374	25.806					22513	35	21.240	1.577	22585	31	16.366	3.080
22288	9	25.849	23.782	22360	10	0.544	25.244					22514	8	21.594	1.942	22586	17	17.074	3.797
22289	8	0.252	24.063	22361	9	1.903	25.534					22515	14	22.174	1.786	22587	13	17.444	3.624
22290	8	0.270	24.418	22362	15	2.394	25.837					22516	11	22.199	1.729	22588	21	18.083	3.888
22291*	48	0.504	24.300	22363	10	2.484	25.795					22517	10	22.288	1.286	22589	27	18.264	3.187
22292	15	0.766	24.840	22364	31	2.676	25.744					22518	12	23.024	1.406	22590	41	18.470	3.838
22293	25	1.419	24.553	22365	10	3.492	25.519					22519	11	23.980	1.755	22591	11	20.934	3.238
22294	8	1.466	24.384	22366	11	3.548	25.878					22520	9	24.044	1.866	22592	15	21.373	3.369
22295	8	1.584	24.445	22367	17	3.666	25.916					22521	12	24.258	1.042	22593	10	21.938	3.545
22296	9	1.676	24.934	22368	21	4.464	25.081					22522	14	25.600	1.230	22594	17	22.156	3.180
22297	27	1.791	24.133	22369	10	4.620	25.834					22523	31	1.120	2.911	22595	27	23.516	3.003
22298	35	1.858	24.619	22370	30	5.088	25.906					22524	14	1.546	2.480	22596	12	24.756	3.526
22299	13	2.168	24.973	22371	14	5.788	25.870					22525	16	2.392	2.461	22597	34	25.087	3.935
22300	9	2.414	24.838	22372	18	5.798	25.890					22526	17	2.456	2.640	22598	36	0.146	4.936
22301	8	2.850	24.784	22373	19	7.052	25.312					22527	11	2.834	2.957	22599	35	0.729	4.802
22302	22	3.434	24.398	22374	8	7.262	25.711					22528	11	4.922	2.274	22600*	75	1.274	4.343
22303	15	3.640	24.112	22375	18	7.386	25.769					22529	11	5.844	2.498	22601	9	2.300	4.742
22304	10	3.734	24.570	22376	36	7.898	25.390					22530	15	6.076	2.155	22602	13	2.446	4.684
22305	8	3.769	24.478	22377	12	9.161	25.520					22531	9	6.693	2.590	22603	8	2.516	4.940
22306	9	3.900	24.401	22378	33	9.393	25.500					22532	16	7.971	2.819	22604	14	2.765	4.726
22307	27	4.892	24.216	22379	8	9.426	25.643					22533	17	8.286	2.917	22605*	44	2.802	4.428
22308	8	5.204	24.924	22380	25	9.655	25.485					22534	9	9.567	2.571	22606	13	3.382	4.034
22309	8	5.695	24.380	22381	8	9.657	25.210					22535	10	10.044	2.339	22607	29	4.166	4.811
22310	8	6.050	24.423	22382	28	10.136	25.180					22536	14	10.332	2.551	22608	11	4.578	4.272
22311																			



22614	28	9.052	4.122	22686	12	23.436	5.508	22758	15	19.584	7.366	22830	11	8.990	9.606	22902	14	23.268	10.050
22615	13	9.456	4.660	22687	36	23.436	5.803	22759	8	19.854	7.750	22831	9	10.901	9.446	22903	17	23.570	10.579
22616	13	9.708	4.010	22688	10	23.528	5.280	22760	40	20.170	7.544	22832	11	11.204	9.142	22904	13	23.584	10.620
22617	11	10.684	4.584	22689	8	24.408	5.416	22761	40	21.038	7.203	22833	12	11.951	9.038	22905	8	23.966	10.664
22618	37	11.009	4.691	22690	10	24.606	5.382	22762	28	21.091	7.560	22834	10	12.218	9.618	22906	13	24.810	10.487
22619	8	11.080	4.887	22691	8	25.124	5.260	22763	11	21.822	7.882	22835	29	13.570	9.858	22907	11	25.193	10.977
22620	19	12.603	4.947	22692	36	25.238	5.515	22764	8	22.778	7.073	22836	26	13.838	9.634	22908	12	25.236	10.840
22621	11	12.818	4.240	22693	39	0.555	6.774	22765	10	23.359	7.962	22837*	41	13.927	9.288	22909	10	25.250	10.470
22622	14	13.117	4.317	22694	20	1.146	6.404	22766*	51	23.727	7.801	22838	9	15.008	9.038	22910	8	25.703	10.641
22623	13	13.261	4.950	22695	25	1.214	6.848	22767	18	0.152	8.420	22839	16	17.262	9.275	22911	18	1.268	11.728
22624	10	13.438	4.296	22696	21	1.734	6.556	22768	29	0.550	8.840	22840	9	18.134	9.657	22912	18	1.500	11.960
22625	12	14.366	4.794	22697*	38	1.756	6.976	22769	16	0.594	8.162	22841	14	18.836	9.642	22913	15	1.740	11.670
22626	25	14.748	4.220	22698	28	2.780	6.016	22770	13	1.452	8.814	22842	10	18.939	9.224	22914	9	6.037	11.642
22627	8	14.928	4.197	22699	13	2.824	6.152	22771*	47	1.604	8.508	22843	22	19.138	9.013	22915	10	6.666	11.642
22628	13	15.770	4.008	22700	12	4.300	6.932	22772	8	2.192	8.576	22844	31	19.680	9.306	22916	8	7.192	11.243
22629	16	16.242	4.968	22701	10	4.642	6.572	22773	11	3.156	8.214	22845	36	20.122	9.598	22917	15	7.253	11.142
22630	19	16.654	4.960	22702	13	7.362	6.272	22774	14	3.944	8.484	22846	35	21.423	9.822	22918	12	8.224	11.288
22631	9	16.758	4.198	22703	10	7.666	6.663	22775	30	4.229	8.598	22847	41	21.460	9.768	22919	12	8.418	11.278
22632	22	17.188	4.741	22704	11	8.388	6.267	22776	16	5.170	8.466	22848	13	21.712	9.060	22920	12	11.050	11.780
22633	22	17.498	4.188	22705	11	8.821	6.258	22777	10	5.572	8.902	22849	8	21.742	9.263	22921	10	12.126	11.562
22634	8	17.838	4.644	22706	8	8.894	6.629	22778	8	6.204	8.878	22850	16	22.329	9.240	22922	10	12.230	11.548
22635	17	20.108	4.558	22707	9	9.909	6.784	22779	8	7.524	8.888	22851	12	22.473	9.078	22923	9	12.264	11.630
22636	29	20.118	4.546	22708	17	11.146	6.422	22780	10	8.033	8.003	22852	27	23.100	9.209	22924	12	13.134	11.307
22637	32	20.148	4.210	22709	21	11.290	6.050	22781	30	8.572	8.129	22853	19	23.534	9.180	22925	30	14.842	11.742
22638	12	21.544	4.460	22710	8	11.673	6.310	22782*	47	9.584	8.762	22854	10	24.345	9.360	22926	10	15.277	11.222
22639	8	21.898	4.396	22711	10	11.985	6.679	22783	9	9.983	8.882	22855	15	25.354	9.732	22927	19	16.036	11.312
22640	26	22.372	4.281	22712	11	12.109	6.356	22784	9	10.752	8.917	22856	29	25.934	9.818	22928	10	16.960	11.244
22641	8	22.930	4.629	22713	26	12.200	6.046	22785	14	11.036	8.516	22857	12	0.231	10.234	22929	10	17.828	11.085
22642	34	23.154	4.376	22714	19	12.420	6.416	22786	35	11.085	8.044	22858	20	0.763	10.552	22930	18	18.256	11.163
22643*	31	23.614	4.613	22715	8	13.326	6.251	22787	10	11.388	8.226	22859	10	1.334	10.392	22931	8	18.712	11.094
22644	9	23.764	4.509	22716	26	13.564	6.676	22788*	59	11.515	8.067	22860	15	1.848	10.726	22932	11	20.086	11.508
22645	12	23.883	4.708	22717	13	13.914	6.866	22789	17	11.658	8.482	22861	8	2.126	10.816	22933	10	22.928	11.638
22646	13	24.834	4.706	22718	10	14.868	6.492	22790	23	12.052	8.372	22862	34	2.454	10.411	22934	10	23.294	11.934
22647	12	25.066	4.473	22719	10	15.060	6.799	22791	12	12.638	8.110	22863	19	2.458	10.638	22935	31	23.376	11.778
22648	40	25.527	4.237	22720	12	16.784	6.594	22792	10	13.490	8.290	22864	10	2.932	10.032	22936	9	23.502	11.368
22649	11	0.592	5.922	22721	12	16.810	6.230	22793	12	13.901	8.283	22865	14	3.057	10.712	22937	15	23.563	11.788
22650	8	3.887	5.780	22722	29	17.433	6.669	22794	10	14.056	8.683	22866*	40	4.994	10.863	22938	36	24.510	11.066
22651	10	4.240	5.216	22723	22	18.047	6.050	22795	12	14.483	8.064	22867	33	5.420	10.669	22939	8	24.590	11.318
22652	9	4.338	5.732	22724	18	18.304	6.768	22796	11	15.250	8.500	22868	10	6.288	10.633	22940	8	25.106	11.066
22653	18	5.120	5.032	22725	17	18.308	6.977	22797	15	17.094	8.406	22869	10	7.248	10.683	22941	13	25.788	11.308
22654	45	5.214	5.370	22726	17	18.498	6.418	22798	14	18.574	8.214	22870	16	8.134	10.460	22942	14	25.808	11.058
22655	13	5.791	5.608	22727	22	18.872	6.813	22799	8	18.700	8.447	22871	10	8.194	10.442	22943	11	0.796	12.540
22656	29	7.300	5.498	22728*	82	20.278	6.030	22800	17	19.006	8.379	22872	8	8.839	10.639	22944	9	1.538	12.411
22657	8	8.041	5.558	22729	39	22.560	6.348	22801	10	19.208	8.140	22873	14	9.344	10.676	22945	11	1.614	12.081
22658	27	8.250	5.516	22730	31	24.222	6.356	22802	18	19.896	8.360	22874	22	9.371	10.488	22946	13	1.634	12.406
22659	26	8.252	5.391	22731	14	24.664	6.439	22803	10	20.080	8.932	22875	11	9.900	10.900	22947	38	2.034	12.178
22660	14	10.356	5.320	22732	32	24.884	6.490	22804	8	21.132	8.600	22876	11	10.274	10.496	22948*	42	2.137	12.014
22661	23	10.390	5.582	22733	9	25.075	6.556	22805	8	21.270	8.942	22877	9	10.724	10.350	22949*	42	2.250	12.444
22662	19	10.646	5.940	22734	13	25.844	6.909	22806	13	21.278	8.128	22878	9	10.889	10.844	22950	17	2.460	12.606
22663	8	12.159	5.808	22735	9	0.696	7.508	22807	11	21.676	8.091	22879	13	11.024	10.765	22951	10	2.670	12.074
22664	9	14.259	5.734	22736	28	0.846	7.840	22808	8	21.938	8.502	22880	12	11.607	10.340	22952	18	2.995	12.912
22665	9	15.169	5.298	22737	9	1.893	7.870	22809	16	22.398	8.426	22881	8	11.755	10.313	22953	28	3.752	12.943
22666	11	15.770	5.110	22738	29	2.496	7.500	22810	21	22.536	8.830	22882	12	12.237	10.508	22954	40	5.021	12.330
22667	16	16.806	5.490	22739	16	2.785	7.677	22811	11	24.571	8.642	22883	11	13.102	10.372	22955	21	5.462	12.508
22668	39	16.816	5.438	22740	8	3.940	7.254	22812	8	25.148	8.534	22884	22	13.448	10.299	22956	14	7.512	12.616
22669	11	17.078	5.622	22741	23	4.634	7.918	22813	40	0.146	9.366	22885	26	13.905	10.524	22957	12	8.238	12.224
22670	19	17.595	5.866	22742	31	9.519	7.533	22814	12	0.400	9.673	22886	21	18.279	10.380	22958	11	8.628	12.314
22671	15	17.830	5.807	22743	15	10.158	7.760	22815	9	0.400	9.834	22887	10	18.630	10.990	22959	9	9.135	12.949
22672	10	18.530	5.628	22744	8	10.448	7.063	22816	10	0.898	9.998	22888	24	18.794	10.918	22960	10	9.692	12.433
22673	10	18.877	5.928	22745	16	10.832	7.557	22817	26	0.942	9.336	22889	42	18.839	10.699	22961	9	10.560	12.170
22674	25	19.614	5.185	22746	22	12.084	7.150	22818	13	1.280	9.536	22890	12	19.238	10.021	22962	8	10.588	12.422
22675	18	20.116	5.394	22747	9	12.840	7.987	22819	23	1.439	9.098	22891	16	19.361	10.706	22963	14	11.068	12.992
22676	30	20.460	5.955	22748*	43	13.047	7.443	22820	12	2.028	9.528	22892	10	19.380	10.996	22964	11	11.266	12.098
22677	32																		



22974	12	15.152	12.392	23046	11	24.280	13.932	23118	10	11.726	15.227	23190	10	19.264	16.516	23262*	80	23.386	17.518
22975	22	16.000	12.328	23047	10	24.522	13.480	23119	32	12.110	15.975	23191	16	19.574	16.043	23263	25	25.826	17.038
22976	10	16.008	12.181	23048	22	24.602	13.443	23120	10	14.670	15.330	23192	16	20.208	16.580	23264	10	1.671	18.248
22977	8	16.632	12.234	23049	17	24.707	13.758	23121	9	14.904	15.391	23193	16	20.637	16.680	23265	8	2.381	18.232
22978	27	16.787	12.322	23050	11	24.810	13.480	23122	8	16.300	15.595	23194	29	20.653	16.599	23266	13	2.602	18.950
22979	11	17.312	12.300	23051	12	25.512	13.167	23123	15	16.450	15.657	23195	16	21.779	16.320	23267	18	3.240	18.592
22980	11	18.184	12.792	23052	10	0.739	14.927	23124	11	16.910	15.214	23196	16	22.250	16.412	23268	9	3.660	18.470
22981	10	18.346	12.944	23053	10	1.674	14.593	23125	23	17.726	15.065	23197	19	22.352	16.479	23269	13	3.704	18.559
22982	8	18.646	12.242	23054	10	2.094	14.802	23126	30	18.056	15.622	23198	11	22.598	16.861	23270	30	4.965	18.483
22983	10	19.308	12.742	23055*	76	4.330	14.752	23127	13	18.385	15.380	23199	22	22.686	16.807	23271	17	5.597	18.630
22984	10	19.468	12.169	23056	23	5.308	14.278	23128	29	19.378	15.698	23200	10	23.199	16.580	23272	13	5.874	18.702
22985	9	20.244	12.140	23057	14	5.340	14.336	23129	9	19.600	15.544	23201	19	24.087	16.092	23273	9	7.464	18.264
22986	10	20.489	12.540	23058	27	6.302	14.424	23130	11	19.630	15.982	23202	8	25.408	16.444	23274	10	7.683	18.811
22987	25	21.580	12.531	23059	15	6.445	14.260	23131	15	19.694	15.084	23203	9	25.457	16.360	23275	23	8.031	18.278
22988	8	21.781	12.342	23060	15	7.246	14.921	23132	21	20.168	15.988	23204	10	25.538	16.740	23276*	42	9.362	18.417
22989	10	22.178	12.802	23061	9	8.377	14.440	23133	29	20.862	15.270	23205	19	25.842	16.382	23277	13	9.418	18.994
22990	13	22.580	12.524	23062	14	8.952	14.422	23134	10	21.894	15.588	23206	39	25.888	16.968	23278	11	10.018	18.144
22991	10	23.122	12.841	23063*	43	11.358	14.450	23135	10	22.077	15.624	23207	9	0.044	17.309	23279	12	10.270	18.394
22992	15	24.156	12.257	23064	12	12.010	14.690	23136	9	22.422	15.761	23208	10	0.277	17.902	23280	12	10.298	18.646
22993	37	24.214	12.756	23065	21	12.576	14.562	23137	25	22.634	15.068	23209	17	0.390	17.683	23281	10	10.587	18.789
22994	15	25.197	12.863	23066	11	14.338	14.686	23138	11	22.736	15.383	23210	12	1.284	17.119	23282	11	10.595	18.250
22995	15	25.428	12.356	23067	11	14.777	14.472	23139	8	23.210	15.219	23211	11	1.408	17.298	23283	11	10.878	18.238
22996	15	0.148	13.048	23068	13	15.122	14.630	23140	10	23.572	15.001	23212	14	1.716	17.770	23284	12	11.330	18.558
22997	8	0.578	13.081	23069	38	15.390	14.267	23141	11	23.606	15.682	23213	11	1.754	17.749	23285	16	11.644	18.450
22998	28	1.290	13.513	23070	11	15.735	14.960	23142	18	24.548	15.826	23214	10	2.582	17.523	23286	12	11.690	18.548
22999	9	1.474	13.042	23071	10	15.864	14.702	23143	13	25.056	15.232	23215	29	3.274	17.832	23287	11	12.134	18.633
23000	13	1.534	13.350	23072	15	16.566	14.738	23144	16	25.846	15.126	23216	8	3.345	17.098	23288	14	12.273	18.526
23001	10	1.740	13.950	23073	8	17.402	14.046	23145	41	25.942	15.818	23217	16	3.386	17.380	23289*	118	13.631	18.060
23002	9	2.365	13.287	23074	9	17.802	14.870	23146	11	1.248	16.122	23218	15	4.661	17.771	23290	8	13.756	18.721
23003	12	5.208	13.820	23075	10	18.116	14.664	23147	19	1.830	16.552	23219	15	5.124	17.628	23291	22	14.109	18.994
23004	10	6.524	13.995	23076	22	18.196	14.252	23148	27	2.832	16.394	23220	12	5.312	17.523	23292	14	14.393	18.826
23005	24	6.802	13.546	23077	10	18.956	14.570	23149	13	2.929	16.455	23221	19	5.714	17.467	23293	12	14.602	18.886
23006	16	7.026	13.912	23078	17	19.256	14.680	23150*	48	3.138	16.404	23222	28	6.424	17.736	23294	12	14.873	18.414
23007	10	7.124	13.742	23079	10	19.600	14.927	23151	8	3.716	16.498	23223	15	6.466	17.570	23295	10	15.331	18.720
23008	8	7.184	13.960	23080	10	19.634	14.149	23152	12	4.286	16.004	23224	11	7.604	17.795	23296	13	15.434	18.504
23009	13	7.314	13.889	23081	26	20.296	14.784	23153	14	5.293	16.058	23225	14	7.902	17.986	23297	15	15.676	18.239
23010	8	7.393	13.042	23082	19	20.829	14.787	23154	10	5.508	16.242	23226	26	7.968	17.664	23298	17	16.492	18.030
23011	14	7.866	13.581	23083	9	21.020	14.588	23155	10	6.210	16.650	23227	23	8.489	17.660	23299	17	17.660	18.044
23012	31	8.734	13.106	23084	12	21.024	14.149	23156	8	7.520	16.028	23228	28	8.562	17.817	23300	9	18.283	18.443
23013	9	9.097	13.104	23085	9	22.817	14.943	23157	13	7.828	16.714	23229	26	8.622	17.460	23301	10	18.292	18.728
23014	9	9.284	13.460	23086	27	22.872	14.924	23158	16	8.440	16.540	23230*	48	8.960	17.804	23302	10	18.310	18.686
23015	21	11.418	13.358	23087	21	23.030	14.548	23159	9	8.981	16.834	23231	9	9.502	17.256	23303	9	18.726	18.156
23016	9	12.190	13.382	23088	8	23.226	14.356	23160	22	9.522	16.212	23232	10	9.708	17.012	23304	34	19.234	18.524
23017	13	12.502	13.354	23089	11	24.034	14.784	23161	13	10.364	16.775	23233	10	10.168	17.705	23305	13	20.752	18.320
23018	12	12.987	13.386	23090	10	24.376	14.948	23162	11	10.680	16.014	23234	12	11.087	17.928	23306	11	20.993	18.930
23019	16	13.017	13.500	23091	9	24.816	14.616	23163	8	11.862	16.633	23235	8	11.150	17.130	23307	46	21.124	18.660
23020	22	13.100	13.606	23092	13	24.932	14.917	23164	37	12.260	16.710	23236	26	12.156	17.551	23308	11	21.568	18.997
23021	12	13.174	13.260	23093	9	0.080	15.520	23165	17	12.533	16.168	23237	13	13.440	17.283	23309	22	21.782	18.938
23022	12	14.265	13.069	23094	12	0.342	15.228	23166	9	12.775	16.643	23238	18	13.648	17.031	23310	11	21.966	18.164
23023	12	14.574	13.550	23095*	40	0.582	15.972	23167	20	13.244	16.801	23239	11	13.654	17.228	23311	14	22.459	18.408
23024	9	14.820	13.412	23096	30	0.814	15.090	23168	9	13.776	16.692	23240	16	14.280	17.818	23312	9	23.134	18.609
23025	27	17.122	13.865	23097	13	1.057	15.604	23169	19	13.780	16.988	23241	10	14.770	17.870	23313	22	24.283	18.144
23026	8	17.258	13.042	23098	14	1.504	15.727	23170	26	14.138	16.135	23242	19	16.646	17.894	23314	12	25.564	18.704
23027	20	17.287	13.830	23099	12	1.813	15.140	23171	15	14.260	16.154	23243	14	16.882	17.078	23315	18	0.145	19.320
23028	30	17.586	13.926	23100	14	2.108	15.818	23172	12	14.312	16.582	23244	19	17.000	17.192	23316	8	0.330	19.724
23029	21	17.713	13.566	23101	10	3.812	15.732	23173	29	14.604	16.544	23245	13	17.117	17.220	23317	12	0.392	19.682
23030	10	17.782	13.822	23102	39	3.815	15.432	23174	20	14.743	16.644	23246	19	17.418	17.704	23318	16	0.628	19.535
23031	10	17.803	13.254	23103	39	3.819	15.374	23175	25	14.756	16.272	23247	10	17.488	17.712	23319	8	2.244	19.186
23032	20	18.194	13.776	23104	16	4.197	15.446	23176	34	15.153	16.090	23248	33	18.914	17.963	23320	10	2.782	19.108
23033	18	19.172	13.592	23105	30	4.250	15.644	23177	15	15.658	16.940	23249	30	18.982	17.230	23321	12	3.748	19.462
23034	19	20.564	13.144	23106	26	4.750	15.497	23178	9	16.055	16.384	23250	11	19.045	17.286	23322	11	4.742	19.140
23035	8	20.930	13.773	23107	10	6.377	15.134	23179	16	16.134	16.970	23251	8	19.085	17.830	23323	19	5.519	19.39



23334	14	9.782	19.436	23406	9	22.474	20.980	23478	11	18.709	22.670	23550	19	8.560	24.653	23622	34	20.677	25.602
23335	22	10.100	19.132	23407	14	22.736	20.568	23479	19	18.984	22.182	23551	29	8.830	24.682	23623	13	22.542	25.300
23336*	41	10.134	19.512	23408	29	23.418	20.598	23480	8	19.146	22.360	23552	25	9.233	24.126	23624	10	23.142	25.468
23337	14	10.590	19.214	23409	8	24.643	20.522	23481	12	19.232	22.527	23553	10	11.046	24.540	23625	9	23.554	25.309
23338	25	10.883	19.580	23410	10	24.784	20.218	23482	13	19.774	22.118	23554*	39	12.038	24.778	23626	8	25.382	25.416
23339*	46	11.238	19.023	23411	9	25.706	20.697	23483	10	19.788	22.566	23555	40	12.975	24.018	23627	44	25.524	25.712
23340	10	12.266	19.150	23412	13	0.432	21.459	23484*	36	19.874	22.048	23556	21	13.652	24.942				
23341	12	12.310	19.620	23413	8	0.894	21.538	23485	8	20.640	22.838	23557	10	13.990	24.441				
23342*	51	12.944	19.958	23414	12	2.000	21.530	23486	12	21.221	22.082	23558	12	14.447	24.601				
23343	19	14.006	19.452	23415	33	3.253	21.520	23487	10	21.321	22.612	23559	38	14.464	24.619				
23344	32	14.114	19.504	23416	16	3.838	21.294	23488	31	21.452	22.828	23560	10	14.724	24.977				
23345	27	14.391	19.032	23417	12	3.880	21.050	23489	10	22.753	22.426	23561	12	14.750	24.649				
23346	15	14.406	19.037	23418	14	4.740	21.168	23490*	47	23.862	22.988	23562*	48	15.106	24.994				
23347	34	15.594	19.268	23419	8	5.436	21.697	23491	26	24.082	22.138	23563	10	15.300	24.363				
23348	12	16.562	19.399	23420	24	5.574	21.540	23492	10	25.718	22.060	23564	8	15.509	24.262				
23349	39	17.226	19.007	23421	10	5.659	21.751	23493	10	0.320	23.452	23565	20	15.554	24.094				
23350	26	17.376	19.836	23422	8	5.937	21.330	23494	11	3.846	23.642	23566	8	15.723	24.290				
23351	10	17.815	19.376	23423	13	7.981	21.891	23495	22	4.140	23.796	23567	17	15.926	24.434				
23352	10	18.095	19.110	23424	32	9.016	21.100	23496	18	4.212	23.081	23568	9	16.040	24.706				
23353	35	18.151	19.228	23425	12	9.060	21.448	23497	9	4.267	23.526	23569	10	16.517	24.442				
23354	11	18.888	19.913	23426	10	10.085	21.189	23498	12	4.534	23.245	23570	8	16.664	24.832				
23355	16	18.890	19.125	23427	16	11.187	21.241	23499	9	4.556	23.463	23571	9	17.156	24.877				
23356*	46	19.313	19.643	23428	29	11.775	21.844	23500	26	4.825	23.614	23572	12	17.168	24.108				
23357	12	19.332	19.383	23429	12	12.505	21.642	23501	39	5.179	23.294	23573	11	17.244	24.856				
23358	38	19.438	19.774	23430	18	12.660	21.041	23502	8	5.491	23.497	23574	8	17.812	24.711				
23359	13	19.750	19.753	23431	13	13.002	21.943	23503	16	6.806	23.840	23575	16	17.876	24.079				
23360	22	19.940	19.414	23432	21	13.672	21.708	23504*	80	6.896	23.220	23576	21	18.400	24.037				
23361	9	22.660	19.413	23433	17	14.456	21.626	23505	12	8.195	23.920	23577	13	19.268	24.423				
23362	8	22.672	19.598	23434*	38	14.789	21.419	23506	10	8.232	23.564	23578	26	19.544	24.662				
23363	25	23.063	19.218	23435	12	14.920	21.600	23507	29	8.615	23.564	23579*	61	19.912	24.658				
23364	8	23.190	19.004	23436	28	15.542	21.730	23508	12	8.817	23.622	23580	12	20.140	24.527				
23365	24	23.378	19.078	23437	11	15.792	21.578	23509	10	9.724	23.164	23581	12	20.700	24.832				
23366	8	23.699	19.324	23438	12	16.412	21.772	23510	8	9.756	23.024	23582	23	21.148	24.122				
23367	10	24.458	19.434	23439	8	16.978	21.146	23511	11	9.998	23.548	23583*	44	22.126	24.392				
23368	14	24.595	19.091	23440	19	17.480	21.938	23512	10	10.796	23.471	23584	9	23.856	24.450				
23369	41	24.701	19.949	23441	14	17.707	21.251	23513	14	11.786	23.631	23585	10	25.020	24.670				
23370	17	24.908	19.082	23442	40	18.106	21.926	23514	10	12.280	23.413	23586	30	25.411	24.264				
23371	21	25.112	19.326	23443	12	18.408	21.280	23515	10	12.383	23.255	23587	16	0.624	25.320				
23372	12	25.160	19.978	23444	12	18.699	21.330	23516	14	13.094	23.914	23588	20	0.970	25.739				
23373	15	25.669	19.395	23445	12	19.459	21.241	23517	29	13.130	23.698	23589	10	1.206	25.366				
23374	14	25.750	19.861	23446	33	21.024	21.980	23518	15	13.569	23.530	23590	13	1.572	25.876				
23375	12	1.566	20.456	23447	14	21.390	21.699	23519	14	13.686	23.026	23591	10	4.167	25.286				
23376	21	1.899	20.420	23448	11	22.627	21.998	23520	35	13.845	23.254	23592	38	4.418	25.632				
23377	16	3.724	20.540	23449	12	24.698	21.654	23521	27	15.238	23.050	23593	9	5.029	25.018				
23378	18	3.918	20.578	23450	12	0.387	22.298	23522	8	15.995	23.856	23594	10	5.153	25.672				
23379	19	3.932	20.531	23451	46	2.627	22.000	23523	9	16.375	23.988	23595	10	6.396	25.067				
23380	9	4.106	20.080	23452	8	3.185	22.049	23524	12	16.692	23.784	23596	36	6.760	25.208				
23381	8	4.164	20.450	23453	40	3.313	22.788	23525	10	17.503	23.270	23597	8	7.136	25.004				
23382	27	4.858	20.066	23454	8	3.873	22.228	23526	25	17.714	23.556	23598	10	7.916	25.634				
23383	13	5.402	20.119	23455	11	4.230	22.156	23527	20	18.774	23.738	23599	13	8.219	25.150				
23384	10	5.434	20.608	23456	11	4.654	22.570	23528	9	19.208	23.552	23600	12	8.730	25.018				
23385	19	5.775	20.888	23457	13	4.865	22.306	23529	8	19.412	23.353	23601	12	8.904	25.586				
23386	8	5.787	20.793	23458	8	5.027	22.932	23530	29	19.526	23.970	23602	28	9.302	25.810				
23387	8	6.343	20.637	23459	21	5.048	22.970	23531	11	19.572	23.160	23603	16	9.965	25.120				
23388	10	6.534	20.756	23460	8	5.706	22.372	23532	13	20.092	23.836	23604	31	10.622	25.872				
23389	17	6.940	20.042	23461	17	6.470	22.144	23533	10	20.501	23.376	23605	13	12.273	25.202				
23390	15	8.178	20.168	23462	10	6.872	22.778	23534	20	21.879	23.854	23606	10	12.596	25.468				
23391	17	9.423	20.513	23463	12	7.754	22.240	23535	10	22.968	23.630	23607	22	12.621	25.890				
23392	22	10.205	20.377	23464	8	7.832	22.270	23536	12	1.228	24.162	23608	11	13.388	25.176				
23393	13	10.535	20.932	23465	8	9.344	22.768	23537	11	3.110	24.400	23609	10	13.646	25.409				
23394	31	11.443	20.629	23466	10	9.508	22.796	23538	10	3.158	24.180	23610	27	14.358	25.308				
23395	10	11.928	20.560	23467	17	9.626	22.825	23539	12	3.680	24.027	23611	10	14.486	25.913				
23396	25	13.144	20.430	23468	9	10.558	22.134	23540	9	4.204	24.934	23612	13	15.542	25.612				
23397	10	13.874	20.599	23469	8	10.636	22.520	23541	39	4.492	24.694	23613	10	15.705	25.519				
23398	24	14.360	20.384	23470	17	11.212	22.098	23542	9	4.652	24.298	23614	28	16.485	25.484				
23399	36	14.508	20.516	23471	9	11.997	22.518	23543	11	5.234	24.759	23615	12	17.026	25.158				
23400	10	14.734	20.403	23472	31	12.300	22.560	23544	12	7.034	24.720	23616	17	17.161	25.996				
23401	10	17.701	20.770	23473	17	12.725	22.606	23545	27	7.104	24.736	23617	9	17.916	25.466				
23402	10	18.270	20.488	23474	16	15.793	22.578	23546	10	7.143	24.943	23618	10	18.836	25.796				
23403	10	19.296																	



23693	10	1-978	1-096	23765	10	21-159	2-089	23837	13	25-286	4-141	23909	17	15-800	6-024	23981	13	15-465	8-560
23694	13	3-325	1-258	23766	8	22-046	2-110	23838	10	25-316	4-699	23910	10	17-280	6-585	23982	10	15-564	8-574
23695	8	4-896	1-894	23767	24	25-234	2-233	23839	12	25-608	4-074	23911	11	17-815	6-112	23983	11	16-992	8-068
23696	9	5-165	1-780	23768	27	25-826	2-963	23840	10	1-038	5-361	23912	29	18-181	6-810	23984*	43	17-034	8-464
23697	24	5-430	1-614	23769	21	1-267	3-067	23841	13	1-226	5-575	23913	28	18-562	6-707	23985	9	18-266	8-062
23698	14	6-122	1-053	23770	10	2-520	3-568	23842	24	1-234	5-866	23914	10	18-714	6-055	23986	13	18-727	8-020
23699	12	6-896	1-120	23771	32	2-854	3-972	23843	8	1-318	5-342	23915	10	19-286	6-654	23987	12	19-724	8-310
23700	36	6-926	1-180	23772	9	5-534	3-671	23844	31	3-030	5-546	23916	9	19-584	6-297	23988	8	21-142	8-112
23701	36	6-930	1-100	23773	10	6-028	3-455	23845	12	3-985	5-457	23917	10	19-732	6-584	23989*	30	23-263	8-239
23702	25	7-344	1-006	23774	30	7-130	3-036	23846	13	5-452	5-983	23918	9	20-317	6-354	23990	13	23-370	8-115
23703	8	7-904	1-702	23775	20	7-179	3-493	23847	16	6-964	5-282	23919	9	20-908	6-362	23991	13	23-501	8-790
23704	13	7-914	1-098	23776	33	7-548	3-232	23848	27	7-210	5-524	23920	11	20-989	6-900	23992	12	24-686	8-820
23705	12	7-918	1-745	23777	17	7-718	3-314	23849	11	7-516	5-696	23921	25	22-509	6-424	23993	12	25-658	8-066
23706	14	8-803	1-616	23778	30	8-468	3-669	23850*	46	8-433	5-932	23922	10	22-580	6-574	23994	11	25-733	8-965
23707	25	9-440	1-012	23779	9	9-018	3-049	23851	11	9-126	5-636	23923	12	22-670	6-983	23995	14	0-184	9-325
23708	14	9-674	1-017	23780	8	9-026	3-696	23852	15	9-175	5-048	23924	11	23-798	6-593	23996	11	0-328	9-160
23709	38	9-800	1-531	23781	11	9-545	3-394	23853	9	9-501	5-760	23925	12	24-037	6-609	23997	14	0-955	9-278
23710	11	10-317	1-866	23782	9	11-304	3-067	23854	11	9-685	5-812	23926	10	24-112	6-818	23998	14	1-388	9-240
23711	9	10-631	1-722	23783	8	11-534	3-455	23855	15	10-074	5-942	23927	20	25-681	6-064	23999	13	3-216	9-763
23712	9	10-708	1-346	23784	17	12-466	3-094	23856	18	10-290	5-868	23928*	47	1-552	7-858	24000	23	3-801	9-839
23713	22	10-876	1-526	23785	14	12-666	3-370	23857	21	10-330	5-672	23929	11	3-270	7-028	24001	10	3-942	9-938
23714	12	11-091	1-544	23786	9	13-220	3-534	23858	14	10-404	5-604	23930	10	4-864	7-124	24002*	48	3-995	9-720
23715	8	11-622	1-412	23787	25	13-249	3-325	23859	9	10-475	5-444	23931	21	5-035	7-105	24003	12	4-175	9-350
23716	29	11-726	1-872	23788	10	14-534	3-512	23860	17	10-902	5-057	23932	11	5-508	7-145	24004	23	4-600	9-686
23717	11	12-606	1-826	23789	32	14-616	3-557	23861	18	11-166	5-732	23933	16	6-166	7-922	24005	10	4-898	9-534
23718	21	12-821	1-813	23790	11	14-926	3-969	23862*	50	11-510	5-036	23934	12	6-438	7-689	24006	18	5-616	9-964
23719	23	13-763	1-069	23791*	49	16-352	3-025	23863	13	11-866	5-344	23935	9	7-779	7-836	24007	14	5-896	9-104
23720	14	14-518	1-848	23792	8	16-452	3-888	23864	12	12-282	5-910	23936	24	9-240	7-324	24008	8	6-316	9-310
23721	11	15-090	1-476	23793	9	17-128	3-536	23865	9	12-534	5-224	23937	20	9-731	7-200	24009	15	6-864	9-666
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23723	23	16-171	1-782	23795	8	18-968	3-300	23867	13	13-214	5-972	23939	15	10-665	7-696	24011	20	7-792	9-364
23724	10	17-264	1-172	23796	16	19-381	3-167	23868	14	14-847	5-940	23940	21	11-300	7-852	24012	24	8-874	9-020
23725	15	17-400	1-494	23797	11	20-484	3-319	23869	9	14-898	5-304	23941	22	11-650	7-030	24013	14	10-068	9-526
23726	25	17-462	1-354	23798	16	21-909	3-118	23870	19	16-860	5-652	23942	10	12-696	7-648	24014	8	10-790	9-466
23727	38	19-974	1-391	23799	12	22-230	3-065	23871	9	17-576	5-939	23943	14	15-481	7-340	24015	19	11-168	9-166
23728	10	22-407	1-254	23800	19	22-331	3-720	23872	9	17-702	5-979	23944	12	16-424	7-534	24016	20	11-449	9-016
23729	32	22-671	1-306	23801	16	22-624	3-465	23873	17	17-748	5-622	23945	16	16-596	7-004	24017	11	11-875	9-915
23730	8	23-087	1-588	23802	20	23-038	3-029	23874	12	19-905	5-028	23946	12	17-015	7-214	24018	14	12-252	9-360
23731	12	23-571	1-356	23803	20	23-522	3-656	23875	9	20-160	5-552	23947	11	17-065	7-918	24019	11	13-295	9-109
23732	10	24-764	1-270	23804	12	23-664	3-252	23876	18	21-020	5-556	23948	13	17-751	7-483	24020	22	15-349	9-414
23733	9	2-044	2-245	23805	22	23-935	3-780	23877	11	21-464	5-728	23949	15	18-154	7-100	24021	10	15-528	9-282
23734	16	2-050	2-656	23806	10	24-676	3-761	23878	12	22-442	5-830	23950	9	18-584	7-616	24022	13	16-669	9-494
23735	25	3-650	2-104	23807	21	0-145	4-365	23879	10	22-487	5-442	23951	12	19-421	7-492	24023	10	17-744	9-988
23736	10	3-706	2-073	23808	26	0-926	4-443	23880	8	23-281	5-486	23952	25	20-149	7-850	24024	10	17-882	9-796
23737	20	4-637	2-626	23809*	26	1-389	4-673	23881	11	23-506	5-731	23953	10	22-701	7-812	24025	14	18-662	9-734
23738	11	5-450	2-907	23810	9	1-543	4-570	23882	14	23-526	5-150	23954*	37	22-988	7-154	24026	10	21-366	9-811
23739*	47	5-768	2-703	23811	11	1-664	4-765	23883	10	23-696	5-140	23955	10	23-299	7-541	24027	12	22-052	9-380
23740	8	5-785	2-161	23812	12	2-616	4-745	23884	9	23-797	5-199	23956	13	0-240	8-506	24028	10	22-244	9-928
23741	11	6-532	2-679	23813	10	2-843	4-508	23885	13	24-404	5-286	23957	14	0-385	8-912	24029	13	22-708	9-293
23742	12	7-404	2-443	23814	41	3-298	4-262	23886	19	25-128	5-622	23958	11	2-419	8-686	24030	18	24-925	9-552
23743	10	7-462	2-916	23815	9	4-333	4-166	23887	31	0-366	6-426	23959	10	4-366	8-093	24031	24	25-843	9-455
23744	11	7-590	2-619	23816	10	4-938	4-898	23888	22	2-029	6-406	23960	13	4-618	8-674	24032*	29	0-538	10-556
23745	18	7-745	2-659	23817	13	5-195	4-696	23889	16	2-474	6-483	23961	16	5-277	8-950	24033	25	0-686	10-314
23746	20	7-968	2-075	23818	15	5-459	4-651	23890	29	2-692	6-527	23962	11	5-611	8-850	24034	10	0-764	10-843
23747	10	8-199	2-451	23819	8	5-478	4-435	23891	11	2-886	6-593	23963	16	6-298	8-462	24035	11	0-895	10-886
23748*	48	8-369	2-846	23820	10	6-296	4-662	23892	9	3-648	6-944	23964	24	6-416	8-733	24036	12	1-139	10-116
23749	23	8-958	2-561	23821	15	8-428	4-101	23893	14	3-662	6-934	23965	22	6-542	8-832	24037	17	1-450	10-638
23750	22	9-115	2-728	23822	12	8-672	4-506	23894	11	5-070	6-816	23966	10	6-737	8-100	24038	12	1-465	10-682
23751	14	9-724	2-406	23823	12	11-099	4-450	23895	23	6-064	6-636	23967	9	8-904	8-185	24039	11	2-689	10-526
23752	37	9-866	2-693	23824	21	11-131	4-350	23896	22	6-376	6-008	23968	10	9-152	8-374	24040	12	3-118	10-874
23753	10	10-135	2-811	23825	25	12-455	4-556	23897	15	8-802	6-420	23969	11	9-837	8-888	24041	10	3-126	10-502
23754	17	10-810	2-655	23826	8	12-688	4-877	23898	9	9-310	6-184	23970	13	10-305	8-209	24042	11	3-143	10-697
23755	10	11-957	2-691	23827	19	12-996	4-784	23899	24	9-807	6-174	23971	9	10-890	8-537	24043	10	3-586	10-665
23756	20	13-695	2-697	23828	18	16-693	4-704	23900	11	10-034	6-107	23972*	38						



24053	11	8.386	10.715	24125	13	2.064	12.308	24197	10	20.150	13.970	24269	9	14.491	15.130	24341	20	7.979	17.523
24054	9	8.820	10.756	24126	28	2.129	12.806	24198	8	20.291	13.168	24270	23	15.160	15.437	24342	14	8.955	17.200
24055	10	9.446	10.604	24127	12	3.116	12.896	24199	9	21.076	13.897	24271	12	15.652	15.129	24343	14	9.004	17.977
24056	12	9.769	10.978	24128	15	3.338	12.386	24200*	22	21.209	13.928	24272	11	16.477	15.440	24344	20	12.118	17.950
24057	12	10.896	10.582	24129*	42	3.920	12.060	24201	9	21.648	13.257	24273	13	16.797	15.262	24345	10	12.630	17.350
24058	11	11.566	10.210	24130	17	4.750	12.988	24202*	40	23.118	13.394	24274	12	16.850	15.480	24346	17	13.190	17.694
24059	10	12.266	10.192	24131	8	5.608	12.342	24203	11	23.318	13.390	24275	11	17.494	15.986	24347	18	13.692	17.754
24060	10	12.442	10.881	24132	9	6.505	12.162	24204	22	23.862	13.840	24276	9	19.531	15.140	24348	27	13.780	17.950
24061	8	13.292	10.800	24133*	45	6.530	12.350	24205	30	24.088	13.488	24277	14	20.300	15.525	24349	9	13.976	17.695
24062	8	13.680	10.522	24134	13	6.614	12.497	24206	16	0.370	14.056	24278	12	20.341	15.973	24350*	34	14.559	17.562
24063	14	14.086	10.892	24135	10	6.686	12.469	24207	23	0.824	14.998	24279	12	20.438	15.150	24351	10	15.286	17.888
24064*	34	15.572	10.128	24136	10	7.556	12.314	24208	14	0.975	14.616	24280	22	20.546	15.100	24352	17	17.510	17.430
24065	13	15.950	10.379	24137	11	8.856	12.030	24209	12	1.988	14.836	24281	22	20.685	15.023	24353	24	17.580	17.974
24066	10	16.374	10.660	24138	10	9.300	12.723	24210	10	2.213	14.071	24282	8	20.929	15.345	24354	10	18.022	17.285
24067	19	16.600	10.457	24139	16	10.090	12.752	24211	12	2.329	14.993	24283	10	21.636	15.172	24355	9	18.776	17.414
24068	14	16.990	10.050	24140	10	11.146	12.352	24212	13	2.886	14.955	24284	19	21.742	15.320	24356	18	19.817	17.626
24069	13	18.224	10.126	24141	9	11.654	12.871	24213	18	4.686	14.877	24285	24	21.790	15.908	24357	23	19.926	17.654
24070	12	18.728	10.194	24142	12	11.902	12.973	24214	13	4.837	14.623	24286	21	22.865	15.912	24358	14	20.974	17.820
24071	9	18.897	10.330	24143	20	13.020	12.042	24215	11	6.233	14.609	24287	13	23.664	15.846	24359	12	21.324	17.090
24072	18	19.390	10.687	24144*	37	13.204	12.685	24216	11	6.953	14.206	24288	25	24.270	15.106	24360	9	23.512	17.444
24073	17	19.780	10.152	24145	9	13.896	12.600	24217*	36	7.580	14.630	24289	11	24.489	15.546	24361	13	23.560	17.164
24074	9	20.122	10.826	24146	11	17.556	12.626	24218	14	8.282	14.071	24290	11	0.226	16.496	24362	17	23.592	17.395
24075	12	20.804	10.718	24147	9	18.106	12.080	24219	12	8.980	14.656	24291	15	0.330	16.558	24363	10	23.647	17.481
24076	12	21.776	10.184	24148	11	18.460	12.808	24220	15	9.153	14.426	24292	10	0.587	16.936	24364	10	24.638	17.464
24077	10	21.834	10.678	24149*	32	19.198	12.865	24221	22	9.190	14.784	24293	20	0.672	16.884	24365	12	25.454	17.094
24078	13	21.950	10.496	24150	9	20.461	12.555	24222	20	9.417	14.512	24294	13	2.060	16.144	24366	12	0.472	18.486
24079	9	22.221	10.006	24151	22	21.140	12.342	24223	22	9.807	14.988	24295	10	3.436	16.386	24367*	31	1.057	18.043
24080	29	25.594	10.822	24152	21	22.182	12.954	24224	11	10.134	14.672	24296	11	3.524	16.766	24368	20	2.290	18.192
24081	22	1.274	11.843	24153	20	22.380	12.132	24225	10	10.424	14.787	24297	17	3.820	16.404	24369	15	3.584	18.730
24082	13	1.462	11.850	24154*	38	23.940	12.936	24226	18	12.692	14.603	24298	28	3.876	16.987	24370	10	5.060	18.190
24083	25	2.398	11.113	24155	17	24.054	12.285	24227	17	12.850	14.984	24299	12	4.004	16.010	24371	9	5.219	18.238
24084	9	2.484	11.364	24156	10	24.081	12.761	24228	11	17.024	14.510	24300	21	4.052	16.746	24372	9	8.312	18.920
24085	9	3.082	11.010	24157	15	24.100	12.324	24229	23	17.308	14.657	24301	20	4.322	16.078	24373	12	9.218	18.596
24086	12	3.680	11.330	24158	10	24.760	12.899	24230	10	17.345	14.191	24302	9	4.381	16.510	24374	9	9.800	18.555
24087	13	3.697	11.082	24159	28	0.428	13.098	24231	23	18.094	14.912	24303	14	4.476	16.055	24375	22	10.122	18.882
24088*	39	4.486	11.700	24160	24	0.682	13.324	24232	14	18.152	14.344	24304	11	6.774	16.064	24376	11	11.101	18.646
24089	9	4.559	11.684	24161	25	1.596	13.176	24233	13	18.480	14.245	24305	10	7.041	16.693	24377	16	11.513	18.998
24090	17	4.872	11.274	24162	12	2.215	13.980	24234	20	18.830	14.560	24306	23	8.045	16.954	24378	9	11.534	18.258
24091	9	5.530	11.052	24163	10	2.452	13.524	24235	15	19.205	14.960	24307	13	9.442	16.634	24379	14	13.504	18.670
24092	23	5.836	11.155	24164	18	2.530	13.485	24236	10	20.624	14.477	24308	20	9.714	16.545	24380	11	13.887	18.729
24093	10	8.386	11.785	24165	12	2.642	13.800	24237*	23	20.865	14.230	24309	21	11.016	16.130	24381	11	14.266	18.787
24094	20	8.851	11.686	24166	10	2.740	13.521	24238	17	20.980	14.755	24310	10	11.510	16.240	24382	21	14.585	18.475
24095	13	9.378	11.576	24167	10	3.185	13.401	24239*	56	22.712	14.240	24311	28	11.672	16.200	24383	17	14.888	18.430
24096	21	11.054	11.890	24168	12	3.437	13.195	24240	22	22.830	14.172	24312	9	13.803	16.003	24384	8	14.926	18.336
24097	12	11.884	11.574	24169	12	5.263	13.510	24241	10	25.262	14.581	24313	10	14.002	16.832	24385	13	15.406	18.140
24098	14	11.988	11.690	24170	10	5.692	13.200	24242	9	25.668	14.263	24314	13	14.196	16.769	24386	20	15.760	18.550
24099	18	12.175	11.456	24171	10	6.038	13.800	24243	19	0.589	15.144	24315	13	15.566	16.060	24387	16	15.930	18.160
24100	20	12.319	11.420	24172	14	7.663	13.570	24244	9	0.699	15.456	24316	23	15.638	16.853	24388	10	16.424	18.180
24101	11	12.508	11.810	24173	10	7.754	13.334	24245	10	1.524	15.064	24317	17	15.764	16.473	24389	10	18.911	18.504
24102	12	12.950	11.686	24174	10	8.050	13.660	24246	9	1.574	15.741	24318	20	15.766	16.021	24390	11	22.500	18.674
24103	13	13.308	11.338	24175	11	10.976	13.086	24247	14	2.517	15.868	24319	10	16.947	16.884	24391	8	23.466	18.605
24104	10	14.110	11.428	24176	11	11.204	13.916	24248	11	3.016	15.268	24320	21	19.064	16.056	24392	20	23.987	18.998
24105	11	14.134	11.205	24177	15	11.204	13.292	24249	18	3.802	15.146	24321	10	19.790	16.026	24393	10	24.554	18.017
24106	14	14.496	11.554	24178	23	11.368	13.300	24250	35	3.908	15.838	24322	11	21.074	16.586	24394	17	1.088	19.286
24107	12	14.980	11.860	24179	9	11.704	13.576	24251	12	4.128	15.578	24323	12	21.210	16.396	24395	18	1.401	19.140
24108	12	15.333	11.714	24180	20	11.903	13.304	24252	11	4.896	15.091	24324*	42	22.256	16.096	24396	9	2.490	19.479
24109	11	17.006	11.915	24181	16	12.544	13.840	24253	16	5.138	15.775	24325	20	24.176	16.063	24397	13	2.618	19.132
24110*	23	17.075	11.565	24182	17	13.238	13.743	24254	21	7.760	15.135	24326	13	24.326	16.160	24398	28	2.738	19.990
24111	19	17.690	11.258	24183	10	13.782	13.071	24255	15	8.566	15.174	24327	10	24.444	16.612	24399	9	2.782	19.187
24112	26	18.770	11.566	24184	11	13.900	13.966	24256	14	8.700	15.107	24328	10	25.142	16.246	24400	12	2.935	19.117
24113	12	19.351	11.402	24185	23	14.070	13.236	24257	20	8.986	15.427	24329	40	0.454	17.536	24401	19	3.140	19.358
24114	9	19.536	11.192	24186	38	14.532	13.450	24258	9	9.764	15.796	24330	15	0.831	17.116	24402	15	3.700	19.418



24413*	36	12.485	19.664	24485	26	18.743	21.220	24557	14	5.141	24.974	24706	39	5.420	2.478
24414	12	15.760	19.270	24486	34	19.835	21.496	24558	10	5.154	24.912	24707	33	6.882	2.530
24415	23	15.873	19.565	24487*	57	22.185	21.047	24559	8	5.300	24.597	24708	31	8.150	2.547
24416	11	16.755	19.129	24488	10	22.848	21.528	24560	13	5.513	24.422	24709	39	8.635	2.949
24417	17	18.611	19.506	24489	10	0.702	22.074	24561	20	5.662	24.504	24710	12	8.886	2.799
24418	21	20.861	19.725	24490	9	0.836	22.500	24562	12	5.975	24.426	24711	15	10.036	2.547
24419	9	20.942	19.444	24491	26	2.159	22.186	24563	10	7.442	24.520	24712	18	10.831	2.634
24420	12	20.994	19.819	24492	9	3.798	22.078	24564	14	7.902	24.914	24713	19	11.328	2.407
24421	13	21.390	19.144	24493	14	4.459	22.215	24565	17	8.062	24.425	24714	12	11.475	2.577
24422	10	22.487	19.820	24494	9	6.788	22.828	24566	26	8.417	24.232	24715	21	11.574	2.170
24423	22	24.764	19.770	24495	12	7.529	22.738	24567	26	8.475	24.962	24716	17	13.245	2.195
24424	10	24.976	19.187	24496	11	9.098	22.432	24568	15	8.502	24.240	24717	18	14.332	2.870
24425	10	25.842	19.320	24497	9	10.903	22.072	24569	11	8.626	24.768	24718	16	14.483	2.567
24426	27	25.846	19.992	24498	11	10.996	22.322	24570	14	8.756	24.550	24719	37	15.576	2.147
24427	20	25.850	19.592	24499	10	12.494	22.508	24571	25	9.252	24.308	24720	23	16.788	2.458
24428	10	0.786	20.642	24500	21	13.108	22.224	24572	10	9.909	24.333	24721	15	16.858	2.585
24429	24	1.468	20.660	24501	10	14.770	22.948	24573	12	10.088	24.545	24722	14	18.245	2.719
24430	11	2.696	20.563	24502	24	14.940	22.690	24574	10	10.515	24.979	24723	12	18.710	2.931
24431	8	2.831	20.256	24503	11	15.060	22.196	24575	28	10.740	24.739	24724	18	21.390	2.689
24432	11	3.200	20.012	24504	11	17.197	22.955	24576	10	11.028	24.299	24725	16	22.352	2.002
24433	11	3.490	20.592	24505	11	18.054	22.744	24577	8	11.202	24.772	24726	20	22.674	2.476
24434	9	3.762	20.720	24506	10	19.186	22.408	24578	36	11.595	24.612	24727	22	24.446	2.380
24435	18	4.151	20.245	24507	15	19.200	22.614	24579	35	12.578	24.851	24728	17	24.769	2.484
24436	13	4.281	20.226	24508	10	19.914	22.929	24580	17	14.202	24.260	24729	16	25.018	2.548
24437	10	4.609	20.461	24509	15	20.398	22.900	24581	11	15.012	24.326	24730	26	0.376	3.581
24438	9	4.624	20.716	24510	10	20.461	22.472	24582	10	15.688	24.764	24731	21	0.666	3.326
24439	11	5.970	20.042	24511	8	22.550	22.428	24583*	41	16.548	24.967	24732	21	1.564	3.512
24440	11	6.430	20.302	24512	9	23.105	22.125	24584	13	16.700	24.564	24733	17	1.706	3.104
24441	17	8.597	20.580	24513	13	25.456	22.806	24585	10	17.606	24.018	24734	34	1.978	3.631
24442	19	9.355	20.844	24514	31	25.555	22.463	24586	15	17.978	24.855	24735	13	2.718	3.610
24443	20	9.734	20.114	24515	17	25.831	22.616	24587	23	18.201	24.191	24736	28	3.334	3.982
24444	18	9.792	20.902	24516	9	1.809	23.275	24588	11	18.998	24.290	24737	16	3.652	3.912
24445	16	10.868	20.208	24517*	42	1.952	23.042	24589	12	19.189	24.330	24738	18	4.432	3.398
24446	15	10.921	20.623	24518	9	3.277	23.395	24590	12	20.952	24.776	24739	29	5.062	3.898
24447	9	10.923	20.419	24519	18	4.368	23.640	24591	15	21.560	24.765	24740	13	5.406	3.207
24448*	30	10.945	20.418	24520	11	5.449	23.300	24592	13	21.867	24.890	24741	19	7.351	3.409
24449	11	12.260	20.508	24521	19	5.732	23.086	24593	14	23.005	24.808	24742	12	7.527	3.398
24450	20	13.070	20.346	24522*	28	6.500	23.994	24594*	40	24.014	24.060	24743	15	9.246	3.426
24451	10	14.130	20.402	24523	11	6.543	23.866	24595	13	0.677	25.375	24744	26	10.724	3.575
24452	18	14.838	20.004	24524	28	6.582	23.807	24596	10	3.520	25.446	24745	17	10.962	3.209
24453	16	18.020	20.920	24525	32	6.624	23.012	24597	54	3.660	25.740	24746	17	12.161	3.490
24454	10	19.104	20.144	24526	20	6.852	23.696	24598	11	4.110	25.712	24747	10	13.432	3.153
24455	10	19.588	20.229	24527	14	8.244	23.556	24599	52	4.403	25.392	24748	23	14.889	3.442
24456*	53	20.927	20.446	24528	11	8.294	23.893	24600	42	4.414	25.796	24749	17	15.142	3.724
24457	11	22.484	20.794	24529	10	8.869	23.944	24601	11	5.413	25.473	24750	15	15.408	3.429
24458	34	23.726	20.335	24530	15	9.082	23.282	24602	9	5.418	25.508	24751	18	16.068	3.447
24459	11	25.908	20.738	24531	24	9.179	23.924	24603	12	7.398	25.530	24752	24	16.858	3.457
24460	9	2.554	21.765	24532	20	9.218	23.893	24604	16	7.592	25.163	24753	20	18.704	3.907
24461	12	2.767	21.694	24533	15	9.779	23.060	24605	34	7.955	25.596	24754	38	19.774	3.000
24462	13	5.589	21.760	24534	23	10.658	23.747	24606	10	8.686	25.350	24755	15	20.634	3.882
24463	14	5.647	21.506	24535	20	11.508	23.705	24607	14	8.706	25.645	24756	20	21.232	3.860
24464	13	6.098	21.356	24536	24	11.900	23.234	24608	8	9.818	25.494	24757	12	21.257	3.579
24465	14	6.112	21.436	24537	9	14.081	23.976	24609	21	10.766	25.130	24758	32	21.452	3.839
24466	10	6.274	21.622	24538	9	16.280	23.058	24610	12	12.052	25.548	24759	11	22.186	3.612
24467	11	6.464	21.115	24539	9	16.903	23.135	24611	37	13.518	25.106	24760	24	22.735	3.611
24468	16	6.737	21.622	24540	18	17.618	23.784	24612	25	14.268	25.576	24761	18	23.180	3.863
24469	11	6.984	21.866	24541	9	17.940	23.752	24613	25	14.690	25.770	24762	10	1.468	4.328
24470	11	7.530	21.260	24542	14	19.270	23.894	24614	16	16.613	25.840	24763	15	2.116	4.480
24471	13	9.460	21.494	24543	24	20.122	23.344	24615	16	17.098	25.414	24764	17	2.172	4.693
24472	10	11.556	21.247	24544	10	20.376	23.926	24616	11	17.207	25.812	24765	15	3.366	4.541
24473	15	13.160	21.226	24545	11	21.514	23.468	24617	9	17.314	25.790	24766	17	4.090	4.289
24474	10	13.316	21.517	24546	9	21.607	23.484	24618	13	17.354	25.915	24767	15	4.165	4.469
24475	20	13.721	21.422	24547	14	22.080	23.354	24619	11	18.230	25.200	24768	32	5.932	4.496
24476	8	13.845	21.440	24548	10	23.644	23.880	24620	14	19.000	25.646	24769	30	6.662	4.777
24477	10	14.340	21.190	24549	29	24.826	23.230	24621	25	19.344	25.854	24770	29	8.443	4.062
24478	24	14.648	21.405	24550	44	0.239	24.473	24622	22	19.721	25.400	24771	15	8.800	4.306
24479	12	15.266	21.985	24551	10	1.978	24.499	24623	16	21.592	25.659	24772	25	9.650	4.698
24480	13	15.894	21.270	24552	12	3.144	24.702	24624	13	22.480	25.239	24773	20	11.068	4.549
24481	24	16.719	21.476	24553	35	3.526	24.294	24625	9	25.172	25.060	24774	11	11.144	4.050
24482	14	17.742	21.485	24554	8	3.802	24.330					24775	21	11.184	4.832
24483	10	17.802	21.162	24555	8	4.176	24.476					24776	16	11.420	4.862
24484	20	18.694	21.876	24556	10	4.305	24.172					24777	18	12.260	4.425

R.A. 7<sup>h</sup> 48<sup>m</sup>

Plate 950 ; 1917 Jan. 20.

Provisional Constants.

A	B	C
-02582	+00066	+4159

D	E	F
-00091	-02577	-4401

Mag. = 17.3 - 1.09√d

No.	d	x	y
24651	16	2.852	0.892
24652	11	3.584	0.774
24653	15	5.305	0.565
24654	17	8.114	0.866
24655	17	8.774	0.936
24656*	84	9.280	0.456
24657*	58	11.199	0.930
24658	16	11.466	0.798
24659	12	12.574	0.233
24660	14	13.523	0.68



24778	32	12.350	4.554	24850	21	12.654	6.719	24922	14	5.498	8.685	24994	36	4.995	10.886	25066	18	2.197	12.176
24779	14	12.735	4.743	24851	31	13.112	6.184	24923*	48	5.770	8.536	24995	17	5.380	10.824	25067	14	2.859	12.744
24780	36	13.544	4.451	24852	23	13.288	6.828	24924	10	6.690	8.336	24996	8	6.453	10.451	25068	12	4.269	12.089
24781	14	14.186	4.661	24853	10	15.114	6.364	24925	15	7.279	8.976	24997	23	6.478	10.194	25069	14	4.626	12.472
24782	20	14.555	4.930	24854	16	16.217	6.988	24926	12	7.414	8.274	24998	12	6.766	10.835	25070	10	5.632	12.551
24783	11	14.661	4.802	24855	18	17.836	6.375	24927	20	7.720	8.242	24999	15	6.840	10.531	25071	26	5.923	12.598
24784	18	16.563	4.435	24856	16	18.903	6.008	24928	16	7.826	8.286	25000	19	8.562	10.369	25072	10	6.114	12.298
24785	15	17.486	4.080	24857	14	19.794	6.774	24929*	66	7.993	8.592	25001	28	8.692	10.074	25073	13	6.938	12.741
24786	17	17.621	4.890	24858	20	20.594	6.644	24930*	38	8.639	8.228	25002	16	8.849	10.580	25074	10	7.522	12.330
24787	11	17.642	4.916	24859	13	20.888	6.235	24931*	44	8.639	8.212	25003	11	10.491	10.492	25075	33	8.108	12.341
24788	18	17.723	4.058	24860	14	21.632	6.809	24932	14	9.660	8.152	25004	33	11.245	10.774	25076	14	8.126	12.845
24789	18	17.964	4.814	24861	18	21.890	6.386	24933	11	10.152	8.213	25005	14	11.792	10.044	25077	11	8.893	12.810
24790	26	18.108	4.762	24862	22	23.417	6.706	24934	17	11.456	8.150	25006*	58	11.797	10.804	25078	12	10.240	12.098
24791	18	18.916	4.630	24863	16	23.800	6.238	24935	28	11.709	8.030	25007	26	14.828	10.498	25079	13	11.991	12.040
24792	13	19.735	4.913	24864	14	24.286	6.470	24936	14	13.660	8.584	25008	9	15.307	10.518	25080	11	13.464	12.174
24793	14	19.803	4.346	24865	10	0.769	7.668	24937	14	14.512	8.838	25009	20	15.362	10.464	25081	14	14.802	12.052
24794	12	20.126	4.900	24866*	57	1.050	7.014	24938	46	16.575	8.262	25010	11	15.377	10.464	25082	9	15.700	12.760
24795	12	20.613	4.269	24867	14	1.364	7.396	24939	16	16.621	8.226	25011	16	17.450	10.518	25083	16	16.158	12.948
24796	19	20.692	4.935	24868	17	1.438	7.968	24940	14	17.348	8.287	25012	12	17.710	10.503	25084	12	17.075	12.069
24797	12	21.860	4.657	24869	16	3.730	7.906	24941	24	20.181	8.526	25013	12	17.981	10.668	25085	16	19.184	12.218
24798	9	22.246	4.907	24870	26	4.921	7.475	24942	22	20.218	8.355	25014	12	18.283	10.150	25086	22	19.304	12.916
24799	30	24.318	4.418	24871	11	5.240	7.464	24943	18	20.876	8.318	25015	52	18.846	10.850	25087	14	20.344	12.272
24800	14	0.500	5.690	24872	16	5.289	7.076	24944	20	21.356	8.526	25016	14	20.283	10.182	25088	23	20.994	12.845
24801	13	1.560	5.584	24873	21	5.639	7.276	24945	21	22.758	8.854	25017	14	21.267	10.232	25089	15	22.347	12.278
24802	13	1.580	5.003	24874	18	5.682	7.393	24946	15	22.796	8.742	25018*	56	21.838	10.282	25090	19	23.689	12.799
24803	16	2.457	5.134	24875	13	6.483	7.874	24947	29	22.850	8.412	25019	12	22.328	10.412	25091	19	24.077	12.638
24804	32	3.182	5.466	24876	22	7.818	7.698	24948	25	23.776	8.268	25020	14	22.358	10.369	25092	12	24.700	12.684
24805	24	3.736	5.904	24877	20	8.182	7.224	24949	12	25.916	8.018	25021	14	22.934	10.080	25093	17	24.748	12.562
24806	15	5.168	5.520	24878	13	8.271	7.052	24950	13	0.128	9.243	25022	22	23.618	10.620	25094	11	25.469	12.000
24807	15	5.196	5.109	24879	34	8.500	7.803	24951	12	0.301	9.872	25023	17	24.178	10.887	25095*	64	1.219	13.252
24808	24	6.150	5.172	24880	15	9.529	7.146	24952	18	0.786	9.154	25024	19	25.500	10.362	25096	18	1.422	13.243
24809	17	6.486	5.244	24881	16	10.377	7.784	24953	21	3.006	9.396	25025	34	25.834	10.816	25097	38	1.968	13.964
24810	11	7.156	5.028	24882	13	11.448	7.162	24954	10	3.136	9.400	25026	27	0.474	11.994	25098	52	2.194	13.340
24811	13	7.230	5.332	24883	23	11.737	7.752	24955	29	3.922	9.294	25027	19	1.376	11.425	25099	21	4.284	13.927
24812	11	8.284	5.699	24884	15	11.952	7.014	24956	12	4.065	9.384	25028*	59	2.846	11.394	25100	37	4.392	13.258
24813	14	8.340	5.158	24885	16	13.609	7.782	24957	8	4.486	9.519	25029	30	4.360	11.094	25101	15	5.576	13.758
24814	11	9.758	5.708	24886	12	13.986	7.918	24958*	53	5.664	9.386	25030	11	4.404	11.532	25102	24	6.498	13.137
24815	34	9.800	5.044	24887	16	14.206	7.564	24959	11	6.087	9.286	25031	10	4.670	11.929	25103	17	6.942	13.615
24816	18	10.007	5.523	24888	13	14.564	7.912	24960	15	7.122	9.126	25032	13	4.762	11.057	25104	14	8.224	13.991
24817	15	11.612	5.262	24889	22	14.572	7.965	24961	19	7.277	9.549	25033	12	4.945	11.508	25105	17	8.796	13.493
24818	20	12.025	5.124	24890	10	14.573	7.494	24962	40	7.915	9.490	25034	12	5.504	11.082	25106*	50	10.611	13.168
24819	16	12.411	5.404	24891	16	15.226	7.256	24963	13	9.202	9.428	25035	16	6.764	11.065	25107*	42	11.062	13.166
24820	16	12.435	5.696	24892	26	15.288	7.834	24964	18	9.316	9.602	25036	36	6.826	11.856	25108	15	11.231	13.054
24821	10	12.568	5.724	24893	13	15.709	7.864	24965	23	10.468	9.263	25037	14	7.500	11.752	25109	16	11.241	13.413
24822	17	15.101	5.453	24894	13	16.116	7.811	24966	14	11.425	9.636	25038	26	9.050	11.722	25110	20	11.513	13.817
24823	23	15.164	5.592	24895	17	17.876	7.554	24967	18	12.012	9.117	25039	14	9.054	11.263	25111	10	13.308	13.528
24824	12	15.529	5.034	24896	13	18.098	7.448	24968	13	12.168	9.784	25040	15	9.500	11.824	25112	12	13.498	13.586
24825	11	15.583	5.780	24897	19	18.116	7.910	24969	14	12.572	9.624	25041	28	10.103	11.964	25113	12	15.426	13.958
24826	19	15.732	5.409	24898	12	19.396	7.207	24970	15	14.968	9.892	25042	12	10.219	11.604	25114	11	15.540	13.792
24827	20	16.940	5.006	24899	20	19.805	7.625	24971	16	15.077	9.066	25043	13	10.990	11.430	25115*	56	15.689	13.652
24828	18	17.002	5.382	24900	18	20.159	7.458	24972	11	15.264	9.544	25044	28	11.338	11.054	25116	13	17.109	13.756
24829	11	17.200	5.022	24901	16	21.482	7.664	24973	9	16.074	9.751	24045	12	12.084	11.954	25117	14	19.276	13.731
24830	15	18.196	5.567	24902	34	21.736	7.704	24974	18	16.325	9.516	25046	24	13.036	11.772	25118	18	19.616	13.454
24831	16	18.562	5.562	24903	36	21.920	7.344	24975	21	16.585	9.056	25047	13	13.880	11.057	25119	12	19.674	13.266
24832	18	19.212	5.259	24904	27	22.712	7.124	24976	17	16.719	9.271	25048	15	14.633	11.496	25120	10	21.116	13.564
24833	15	19.706	5.266	24905	19	23.215	7.678	24977	14	17.916	9.448	25049	26	14.758	11.598	25121	21	21.658	13.588
24834	19	20.914	5.959	24906	15	23.215	7.872	24978	15	18.249	9.707	25050	19	15.144	11.276	25122	24	21.878	13.880
24835	10	21.774	5.388	24907	15	23.278	7.774	24979	9	18.790	9.670	25051	20	15.689	11.928	25123	32	22.285	13.498
24836	14	21.974	5.438	24908	30	24.575	7.834	24980	14	19.067	9.242	25052	24	18.695	11.324	25124	23	22.451	13.402
24837	30	22.428	5.226	24909*	68	24.809	7.984	24981	13	19.149	9.850	25053	13	18.908	11.182	25125	23	22.588	13.022
24838	44	25.250	5.950	24910	17	25.152	7.510	24982	12	19.569	9.564	25054	15	19.440	11.564	25126	14	23.104	13.850
24839	36	0.570	6.284	24911	16	25.209	7.312	24983	50	19.901	9.196	25055	21	20.568	11.820	25127	16	24.050	13.286
24840	8	0.635	6.436	24912	18	25.634	7.196	24984	50	19.941	9.154	25056	13						



25138	10	7.234	14.336	25210	18	24.714	15.016	25282	18	13.048	17.760	25354	12	15.072	19.693	25426	29	24.704	21.438
25139	11	7.605	14.844	25211	16	24.908	15.292	25283	10	13.271	17.062	25355	36	15.102	19.384	25427	46	2.994	22.976
25140	27	8.456	14.924	25212	18	2.446	16.008	25284	11	13.362	17.244	25356	25	16.534	19.144	25428	26	3.628	22.650
25141	17	9.074	14.538	25213	16	2.572	16.460	25285	20	13.506	17.632	25357	10	16.704	19.398	25429	37	3.721	22.304
25142*	56	9.321	14.481	25214	11	3.266	16.088	25286	10	15.851	17.042	25358	15	17.000	19.888	25430	26	4.000	22.454
25143	10	10.050	14.635	25215	16	3.584	16.934	25287	16	16.151	17.171	25359	12	18.024	19.386	25431*	50	5.574	22.733
25144	13	10.264	14.470	25216	11	3.824	16.764	25288	16	16.906	17.958	25360	13	18.068	19.318	25432	27	6.184	22.380
25145	22	10.318	14.025	25217	14	4.506	16.190	25289	12	16.988	17.112	25361	16	19.184	19.452	25433	13	10.612	22.424
25146	16	10.616	14.981	25218	21	4.549	16.450	25290	20	17.422	17.679	25362	14	19.364	19.644	25434	13	10.671	22.366
25147	16	11.377	14.245	25219	16	6.112	16.078	25291	19	17.840	17.760	25363	21	20.218	19.465	25435	25	10.895	22.386
25148	26	12.051	14.092	25220	13	6.198	16.498	25292*	58	18.128	17.138	25364	22	20.622	19.809	25436	36	11.228	22.241
25149	18	12.062	14.467	25221	12	6.562	16.992	25293	19	18.834	17.716	25365	14	20.934	19.220	25437	13	12.441	22.455
25150	17	12.836	14.672	25222	14	6.650	16.100	25294	22	19.352	17.046	25366	17	21.384	19.284	25438	13	13.158	22.942
25151	20	13.014	14.442	25223	19	6.892	16.446	25295	16	20.770	17.548	25367	28	23.215	19.412	25439	22	13.202	22.126
25152	16	13.174	14.938	25224	11	7.341	16.712	25296	13	21.824	17.272	25368	28	24.616	19.034	25440	18	13.512	22.977
25153	15	14.128	14.072	25225	17	8.448	16.577	25297	10	22.250	17.448	25369	13	25.234	19.698	25441	14	14.519	22.369
25154	34	14.836	14.935	25226	15	8.614	16.326	25298	24	22.828	17.012	25370	13	25.675	19.006	25442	17	16.291	22.522
25155*	40	14.836	14.168	25227*	52	8.928	16.774	25299	17	24.142	17.409	25371	17	25.956	19.817	25443	32	18.278	22.100
25156	19	14.942	14.626	25228	14	9.061	16.772	25300	13	24.234	17.581	25372	78	0.334	20.914	25444	52	18.650	22.528
25157	11	15.208	14.666	25229	17	9.434	16.635	25301	16	0.641	18.534	25373	14	0.634	20.654	25445	14	20.866	22.627
25158	21	15.498	14.866	25230	11	10.418	16.206	25302	30	2.128	18.849	25374	49	1.875	20.190	25446	16	21.484	22.071
25159	16	18.016	14.316	25231*	35	11.035	16.778	25303	50	6.882	18.046	25375	12	3.040	20.464	25447	44	22.008	22.938
25160	37	18.588	14.174	25232	31	11.136	16.344	25304	15	6.919	18.350	25376	22	4.060	20.577	25448	37	22.264	22.834
25161	22	18.926	14.464	25233	14	11.758	16.110	25305	16	6.982	18.427	25377	15	5.248	20.900	25449	26	22.542	22.772
25162	11	19.080	14.032	25234	16	12.240	16.236	25306	14	7.340	18.440	25378	36	5.374	20.339	25450	36	22.904	22.842
25163	11	20.400	14.368	25235	13	12.291	16.951	25307	13	8.136	18.354	25379	12	5.597	20.112	25451	24	24.772	22.884
25164	14	20.936	14.868	25236	11	12.408	16.272	25308	10	8.846	18.088	25380	22	6.170	20.182	25452	28	25.160	22.342
25165	15	21.412	14.275	25237	27	12.532	16.033	25309	24	10.238	18.082	25381	14	7.300	20.496	25453	46	25.528	22.533
25166	26	21.828	14.975	25238	21	12.732	16.394	25310*	60	13.730	18.424	25382	14	8.672	20.348	25454	17	0.256	23.214
25167	19	21.982	14.417	25239	23	12.954	16.718	25311	9	14.060	18.837	25383	36	9.985	20.587	25455*	57	2.188	23.912
25168	15	22.143	14.692	25240	21	12.976	16.944	25312	13	14.448	18.238	25384	13	10.012	20.342	25456	15	3.344	23.298
25169	13	23.468	14.684	25241*	58	13.828	16.868	25313	10	14.864	18.876	25385	13	11.647	20.776	25457	20	4.408	23.374
25170	23	24.802	14.833	25242*	42	14.971	16.644	25314	24	15.578	18.142	25386	20	12.304	20.922	25458	19	5.020	23.755
25171	60	0.375	15.960	25243*	30	15.126	16.096	25315	37	16.173	18.087	25387	16	13.849	20.428	25459	16	5.708	23.044
25172	26	0.984	15.770	25244	23	15.739	16.132	25316	18	16.480	18.821	25388	10	14.152	20.554	25460*	86	5.841	23.401
25173	16	1.786	15.698	25245	15	17.536	16.618	25317	12	17.378	18.736	25389	13	14.216	20.123	25461	14	8.984	23.212
25174	26	2.298	15.914	25246	37	17.686	16.141	25318	17	18.067	18.336	25390	36	16.762	20.666	25462	14	9.378	23.967
25175	10	2.484	15.527	25247	15	18.642	16.836	25319	17	18.186	18.478	25391	32	17.168	20.279	25463	19	9.684	23.587
25176	18	2.608	15.394	25248	28	19.550	16.434	25320	24	18.230	18.862	25392	11	17.175	20.886	25464	36	9.738	23.722
25177*	76	5.531	15.220	25249	20	20.764	16.517	25321	18	20.468	18.850	25393	17	17.484	20.452	25465	11	10.116	23.722
25178	13	5.842	15.189	25250	20	21.044	16.233	25322	24	20.727	18.236	25394	10	17.892	20.020	25466	17	10.948	23.504
25179	14	6.125	15.486	25251	13	21.583	16.663	25323	11	20.908	18.708	25395	13	18.418	20.889	25467	15	11.228	23.223
25180	25	6.178	15.605	25252	13	22.200	16.760	25324	14	21.061	18.126	25396	14	20.894	20.256	25468	13	12.730	23.366
25181*	79	6.664	15.422	25253	13	22.692	16.460	25325	18	22.026	18.658	25397	44	22.125	20.186	25469	12	13.445	23.602
25182*	43	7.210	15.926	25254	15	22.964	16.664	25326	15	22.253	18.493	25398	16	22.314	20.872	25470	15	14.292	23.672
25183	13	7.812	15.332	25255	13	23.036	16.658	25327	34	22.534	18.801	25399	44	23.848	20.414	25471	23	15.006	23.806
25184	13	8.772	15.508	25256	11	23.555	16.471	25328	18	22.564	18.368	25400	21	24.854	20.476	25472	26	15.768	23.956
25185	9	9.216	15.336	25257	14	25.620	16.558	25329	30	23.421	18.624	25401	14	2.606	21.771	25473	25	16.620	23.075
25186	10	9.349	15.238	25258	13	1.642	17.296	25330	15	24.990	18.381	25402	15	4.142	21.820	25474	15	17.508	23.110
25187	13	9.464	15.575	25259	20	1.690	17.015	25331	40	25.253	18.424	25403	18	4.590	21.952	25475	32	17.592	23.244
25188	14	9.856	15.388	25260	32	1.722	17.248	25332	9	25.792	18.304	25404	17	6.214	21.410	25476	36	18.616	23.934
25189	11	10.997	15.167	25261	13	1.770	17.344	25333	14	0.636	19.682	25405	14	6.829	21.878	25477	12	20.038	23.986
25190	11	11.765	15.437	25262	16	1.778	17.334	25334	33	2.908	19.616	25406	15	8.175	21.675	25478	14	20.048	23.112
25191	10	12.601	15.221	25263	11	2.400	17.599	25335	9	3.028	19.801	25407	38	8.388	21.442	25479	16	22.823	23.976
25192	17	12.780	15.102	25264	15	2.687	17.864	25336	17	3.121	19.030	25408	20	9.726	21.065	25480	30	23.189	23.140
25193	15	14.450	15.556	25265	13	2.772	17.311	25337	14	3.986	19.156	25409	12	12.180	21.604	25481	13	25.235	23.743
25194	17	14.546	15.072	25266	11	3.738	17.591	25338	38	3.994	19.832	25410	26	12.873	21.730	25482	16	25.605	23.135
25195	23	15.340	15.742	25267	23	4.674	17.933	25339	23	3.995	19.432	25411	22	12.934	21.606	25483	13	0.050	24.754
25196	28	15.761	15.814	25268	14	5.966	17.628	25340	18	4.458	19.083	25412	24	13.266	21.380	25484	28	1.190	24.666
25197	13	16.020	15.588	25269	37	6.376	17.202	25341	14	5.081	19.622	25413	11	13.633	21.308	25485	16	3.358	24.902
25198	13	16.428	15.674	25270	17	6.842	17.258	25342	13	5.556	19.599	25414	34	13.721	21.542	25486	17	5.848	24.328
25199	10	16.473	15.385	25271	15	8.130	17.446	25343	19	5.957	19.502	25415*	41	15.230	21.66				



25498	32	14.572	24.561	25560	20	12.247	0.470	25632	13	11.466	2.370	25704	30	19.682	4.019	25776	11	11.878	6.460
25499	11	14.718	24.588	25561	14	13.497	0.496	25633	31	12.235	2.467	25705*	65	20.656	4.174	25777	11	12.150	6.445
25500	34	16.036	24.784	25562	24	13.636	0.512	25634	42	12.945	2.311	25706	27	20.945	4.206	25778	19	12.568	6.583
25501	34	16.774	24.156	25563	29	13.768	0.306	25635	13	14.270	2.866	25707	24	21.018	4.050	25779	13	13.174	6.801
25502	29	18.224	24.632	25564	58	14.286	0.778	25636	16	14.588	2.285	25708	12	21.743	4.796	25780	15	13.918	6.776
25503	37	18.344	24.826	25565	28	15.292	0.171	25637	40	14.719	2.128	25709	11	22.249	4.730	25781	17	14.221	6.532
25504	15	18.490	24.598	25566	14	17.670	0.024	25638	12	15.465	2.369	25710	21	25.306	4.086	25782	12	15.422	6.052
25505	17	19.026	24.648	25567	14	18.284	0.566	25639	18	15.785	2.900	25711	11	25.354	4.220	25783	13	15.822	6.686
25506	10	20.869	24.002	25568	15	19.060	0.956	25640	14	15.950	2.999	25712	11	3.441	5.607	25784	20	15.913	6.08
25507	12	22.170	24.049	25569	20	20.286	0.884	25641	25	16.317	2.624	25713	13	3.460	5.336	25785	18	17.179	6.510
25508	13	22.240	24.158	25570	18	20.969	0.252	25642	37	18.622	2.346	25714	14	4.650	5.078	25786	13	17.462	6.804
25509	16	23.402	24.158	25571	19	21.307	0.040	25643	13	18.788	2.703	25715	12	5.560	5.052	25787	14	17.802	6.492
25510*	54	23.942	24.296	25572	13	21.600	0.410	25644	12	19.669	2.431	25716	35	5.608	5.180	25788	12	18.912	6.416
25511	17	25.144	24.975	25573	19	21.857	0.414	25645	15	21.714	2.679	25717	12	5.756	5.974	25789	15	18.955	6.664
25512	29	0.666	25.102	25574	12	21.936	0.381	25646	14	22.377	2.658	25718	12	6.403	5.656	25790	12	19.401	6.047
25513	37	5.434	25.517	25575	13	23.210	0.218	25647	19	22.388	2.059	25719	10	7.134	5.352	25791	15	20.216	6.675
25514	13	5.610	25.351	25576	11	23.326	0.992	25648	16	24.070	2.203	25720*	51	7.700	5.218	25792	36	20.219	6.234
25515	11	6.766	25.323	25577	15	24.046	0.944	25649	16	0.224	3.729	25721	14	7.694	5.020	25793	12	20.268	6.450
25516	30	6.914	25.287	25578	20	25.678	0.071	25650	18	0.673	3.974	25722	13	9.084	5.196	25794	37	20.450	6.972
25517	13	8.509	25.000	25579	28	1.132	1.129	25651	11	0.888	3.679	25723	17	9.546	5.493	25795	10	20.527	6.558
25518	18	9.456	25.834	25580	13	2.887	1.262	25652	12	2.200	3.657	25724	13	10.090	5.616	25796	24	20.700	6.816
25519	18	9.555	25.772	25581	22	4.082	1.750	25653	26	4.733	3.548	25725	42	10.268	5.813	25797	11	23.608	6.773
25520	15	10.010	25.428	25582	16	4.323	1.856	25654	15	5.200	3.949	25726	27	10.943	5.506	25798	25	24.144	6.069
25521	12	11.149	25.149	25583	12	4.785	1.514	25655	24	5.706	3.685	25727	15	12.320	5.254	25799	22	24.299	6.666
25522	15	11.716	25.291	25584	23	5.852	1.582	25656	12	7.677	3.525	25728	23	13.478	5.883	25800	11	25.270	6.542
25523	13	12.370	25.906	25585	11	7.095	1.650	25657	17	7.738	3.409	25729	10	13.566	5.866	25801	18	25.285	6.286
25524	11	13.116	25.337	25586	11	8.283	1.543	25658	15	9.020	3.821	25730	12	14.464	5.344	25802	15	25.300	6.800
25525	24	16.517	25.490	25587	12	8.528	1.823	25659	23	9.997	3.768	25731	13	14.629	5.259	25803	27	0.244	7.238
25526	16	16.566	25.436	25588	45	9.464	1.356	25660	18	10.117	3.055	25732	13	15.386	5.540	25804	16	0.752	7.786
25527	34	16.776	25.907	25589	13	9.957	1.996	25661	13	12.008	3.624	25733	13	15.462	5.580	25805	13	0.756	7.982
25528	16	17.246	25.084	25590	10	10.119	1.248	25662	29	12.724	3.489	25734	28	15.864	5.297	25806	15	0.815	7.882
25529	20	19.036	25.114	25591	30	10.331	1.704	25663	12	12.738	3.338	25735	14	16.230	5.824	25807	10	1.626	7.720
25530	17	19.454	25.485	25592	49	10.580	1.033	25664	18	12.934	3.067	25736	11	17.214	5.286	25808	32	2.112	7.926
25531	29	20.384	25.620	25593	20	12.135	1.174	25665	22	13.560	3.518	25737*	44	17.346	5.296	25809	11	2.145	7.438
25532	23	20.824	25.386	25594	17	12.554	1.960	25666	27	13.584	3.823	25738	11	17.458	5.278	25810	15	2.690	7.598
25533	44	22.218	25.099	25595	27	13.071	1.273	25667	19	14.013	3.461	25739	10	17.523	5.534	25811	13	2.743	7.400
25534	33	23.742	25.345	25596	21	13.948	1.620	25668	13	14.818	3.908	25740	14	17.575	5.736	25812	21	3.166	7.278
25535	12	24.630	25.532	25597	14	14.880	1.274	25669	9	16.516	3.502	25741	11	17.894	5.566	25813	23	4.037	7.336
25536	22	25.125	25.882	25598	12	14.975	1.445	25670	16	16.706	3.528	25742	16	17.941	5.626	25814	39	4.174	7.798
				25599	27	15.453	1.136	25671*	57	16.836	3.284	25743	24	19.454	5.626	25815	10	5.500	7.116
				25600	15	15.824	1.616	25672	23	17.018	3.975	25744	34	19.545	5.618	25816	13	5.674	7.095
				25601	12	17.810	1.690	25673	12	18.375	3.938	25745	13	19.725	5.603	25817	16	6.698	7.554
				25602	10	17.924	1.103	25674	12	18.456	3.109	25746	9	19.732	5.594	25818	13	7.484	7.800
				25603	10	18.264	1.896	25675	12	19.906	3.627	25747	12	21.272	5.454	25819	10	8.375	7.050
				25604	34	18.870	1.272	25676	12	21.456	3.268	25748	13	21.564	5.050	25820	13	8.488	7.204
				25605	26	18.880	0.560	25677	10	22.990	3.187	25749	12	21.970	5.843	25821	15	8.814	7.102
				25606	18	19.450	1.610	25678	11	23.661	3.786	25750	15	22.418	5.078	25822	20	8.818	7.609
				25607	27	20.685	1.062	25679	23	25.568	3.354	25751	14	23.723	5.594	25823	11	9.648	7.524
				25608	12	21.210	1.950	25680	12	0.664	4.042	25752	10	24.773	5.316	25824	14	10.694	7.367
				25609	34	21.412	1.254	25681	12	1.208	4.125	25753	27	25.495	5.682	25825	16	10.944	7.770
				25610	10	22.894	1.510	25682	23	1.816	4.516	25754	20	0.040	6.814	25826	12	11.812	7.596
				25611	25	24.620	1.452	25683	12	1.950	4.302	25755	16	1.319	6.337	25827	10	12.527	7.301
				25612	51	25.438	1.185	25684	12	2.392	4.790	25756	16	1.812	6.565	25828	27	12.570	7.780
				25613	17	0.156	2.594	25685	9	4.134	4.332	25757	13	2.186	6.968	25829	25	12.732	7.916
				25614	19	1.918	2.474	25686	10	4.190	4.060	25758	47	2.762	6.038	25830	12	14.178	7.828
				25615	9	2.111	2.150	25687	12	4.200	4.398	25759	21	3.842	6.328	25831	13	14.388	7.840
				25616	17	2.246	2.573	25688	20	5.666	4.230	25760	16	4.062	6.726	25832	17	14.392	7.306
				25617	18	2.495	2.636	25689	14	6.194	4.510	25761	34	4.120	6.036	25833	12	14.896	7.282
				25618	33	3.647	2.642	25690	13	6.474	4.466	25762	13	4.662	6.982	25834	15	15.190	7.772
				25619	24	5.137	2.551	25691	40	11.240	4.493	25763	11	5.159	6.502	25835	13	15.400	7.858
				25620	19	5.185	2.770	25692	25	11.660	4.808	25764	13	5.184	6.307	25836	17	15.886	7.762
				25621	19	5.756	2.057	25693	10	11.797	4.594	25765	25	5.385	6.144	25837	10	16.567	7.944
				25622	12	6.022	2.187	25694	13	12.878	4.712	25766	11	6.270	6.380	25838	11	16.614	7.350
				25623	20	6.716	2.402	25695	23	12.958	4.507	25767	14	6.656	6.598	25839	10	16.795	7.892
				25624	16	7.125	2.714	25696	13	13.902	4.864	25768	12	6.780	6.144	25840	22	17.052	7.343
				25625	43	8.532	2.600	25697	14	14.525	4.530	25769	16	6.893	6.357	25841	11	17.052	7.012
				25626</															



25848	11	19.620	7.456	25920	13	8.466	9.820	25992	13	18.029	10.936	26064	16	14.009	12.456	26136	18	11.900	14.670
25849	18	19.839	7.950	25921	26	9.041	9.507	25993	30	18.647	10.400	26065	14	14.770	12.838	26137	11	12.112	14.344
25850	23	20.465	7.810	25922	13	9.330	9.590	25994	12	18.916	10.940	26066	10	16.511	12.433	26138	22	13.190	14.720
25851	20	20.520	7.020	25923	21	9.400	9.420	25995	19	20.964	10.730	26067	14	17.462	12.441	26139	14	13.818	14.294
25852	23	21.743	7.270	25924	13	9.790	9.960	25996	16	22.020	10.736	26068	14	17.617	12.387	26140	24	14.037	14.237
25853	19	22.661	7.111	25925	13	10.146	9.505	25997	13	22.634	10.615	26069	12	17.875	12.011	26141*	48	14.100	14.707
25854	16	22.940	7.064	25926	22	11.389	9.820	25998	17	22.894	10.023	26070	12	19.520	12.719	26142	14	16.408	14.634
25855	20	23.416	7.726	25927	18	11.512	9.593	25999	13	24.367	10.660	26071	12	19.913	12.948	26143	13	17.520	14.690
25856	11	23.606	7.016	25928	12	12.104	9.940	26000	12	25.216	10.953	26072	13	19.992	12.332	26144*	36	17.544	14.486
25857	20	24.811	7.628	25929	16	12.596	9.777	26001	18	25.440	10.594	26073	12	21.222	12.032	26145	18	17.629	14.396
25858	9	0.116	8.657	25930	12	13.120	9.212	26002	17	0.290	11.986	26074*	43	22.210	12.235	26146	13	17.918	14.288
25859	21	0.309	8.968	25931	12	13.568	9.542	26003	11	0.930	11.946	26075	13	23.079	12.250	26147	12	18.884	14.300
25860	17	0.346	8.856	25932	12	13.571	9.769	26004	37	0.980	11.500	26076	16	23.192	12.760	26148	27	19.976	14.156
25861	30	0.394	8.525	25933	11	14.219	9.722	26005	20	1.300	11.700	26077	27	0.058	13.521	26149	12	20.450	14.886
25862	22	1.322	8.372	25934	17	15.309	9.633	26006	12	1.790	11.145	26078	27	0.188	13.138	26150	16	20.598	14.159
25863	10	2.140	8.616	25935	30	15.710	9.033	26007	15	4.548	11.274	26079	12	0.254	13.446	26151	12	20.907	14.507
25864*	62	2.344	8.072	25936	15	16.107	9.992	26008	20	6.197	11.556	26080	14	0.717	13.958	26152	12	22.168	14.964
25865	16	3.460	8.096	25937	33	16.426	9.434	26009	14	6.774	11.764	26081	18	1.657	13.387	26153	12	22.882	14.240
25866	14	3.756	8.100	25938	16	16.470	9.450	26010	15	7.180	11.228	26082	15	3.134	13.079	26154	11	23.326	14.557
25867	22	4.098	8.406	25939	25	16.774	9.039	26011	21	8.268	11.628	26083	30	3.365	13.228	26155	14	23.390	14.106
25868	10	4.726	8.818	25940	14	16.948	9.250	26012	12	8.711	11.652	26084	12	3.610	13.736	26156	14	24.087	14.916
25869	10	4.995	8.223	25941	14	16.977	9.197	26013	17	8.732	11.166	26085	39	3.714	13.722	26157	18	24.144	14.552
25870	26	5.469	8.178	25942	24	17.186	9.820	26014	22	9.690	11.383	26086	12	4.834	13.379	26158	12	24.334	14.106
25871	15	5.846	8.593	25943	15	17.616	9.040	26015	12	10.260	11.277	26087	11	5.100	13.703	26159	12	25.255	14.545
25872	10	7.104	8.518	25944	32	18.216	9.137	26016	12	10.892	11.558	26088	17	7.603	13.407	26160	21	0.838	15.793
25873	13	7.390	8.445	25945	13	18.573	9.630	26017	11	13.326	11.209	26089	16	7.617	13.133	26161	33	1.102	15.560
25874	16	7.503	8.341	25946	23	19.072	9.890	26018	11	13.550	11.806	26090	16	7.736	13.545	26162	12	1.362	15.177
25875	12	8.340	8.045	25947	21	19.084	9.388	26019	18	14.434	11.086	26091	12	7.930	13.062	26163	22	2.343	15.107
25876	18	9.080	8.937	25948	22	19.790	9.716	26020	29	14.728	11.400	26092	25	8.558	13.505	26164	15	2.538	15.382
25877	13	9.446	8.216	25949	21	19.850	9.216	26021	18	15.112	11.662	26093	21	8.632	13.912	26165	13	3.696	15.012
25878	23	9.538	8.621	25950	12	20.074	9.312	26022	12	16.189	11.632	26094*	45	9.072	13.047	26166	39	4.425	15.236
25879	32	10.128	8.833	25951	13	20.331	9.026	26023	12	16.665	11.276	26095	15	9.526	13.596	26167	12	4.569	15.094
25880	12	10.748	8.339	25952	24	21.144	9.952	26024	10	16.840	11.122	26096	14	9.846	13.202	26168	34	4.810	15.274
25881	23	11.127	8.750	25953	12	21.438	9.164	26025	12	18.454	11.280	26097	12	11.320	13.632	26169	16	4.837	15.457
25882	14	11.322	8.820	25954	17	21.650	9.833	26026	12	18.852	11.580	26098	19	12.033	13.515	26170	20	4.940	15.081
25883	21	12.014	8.542	25955	20	23.036	9.331	26027	17	19.152	11.201	26099	13	12.382	13.441	26171	14	5.539	15.306
25884	13	12.376	8.810	25956	11	23.621	9.450	26028	10	20.456	11.248	26100	14	12.393	13.606	26172	11	5.556	15.291
25885	15	12.624	8.096	25957	12	0.500	10.196	26029	14	21.195	11.751	26101	26	12.997	13.065	26173	12	6.047	15.167
25886	12	13.282	8.865	25958	17	0.940	10.080	26030	12	23.314	11.984	26102	12	13.625	13.166	26174	14	6.208	15.834
25887	25	14.387	8.830	25959	27	1.189	10.726	26031	16	23.526	11.843	26103	12	13.860	13.462	26175	13	6.874	15.668
25888	15	14.469	8.846	25960	21	1.750	10.984	26032	15	24.730	11.180	26104	21	15.548	13.480	26176*	49	6.950	15.133
25889	15	15.180	8.516	25961	13	2.857	10.334	26033	12	25.819	11.938	26105	18	16.200	13.517	26177	15	6.978	15.710
25890	15	15.229	8.950	25962	24	3.069	10.446	26034	24	1.288	12.902	26106	12	16.264	13.436	26178	16	7.084	15.334
25891	12	16.213	8.412	25963	30	3.406	10.895	26035	23	1.674	12.738	26107*	32	17.379	13.750	26179	19	7.132	15.830
25892	29	16.279	8.757	25964	12	4.127	10.650	26036	14	2.302	12.778	26108	33	19.645	13.050	26180	31	7.246	15.954
25893	12	16.665	8.340	25965*	58	5.020	10.839	26037	17	2.345	12.650	26109	14	20.239	13.387	26181	12	7.364	15.772
25894	21	16.768	8.846	25966	20	5.684	10.662	26038	19	3.057	12.082	26110	19	21.494	13.515	26182	21	7.554	15.000
25895	20	17.530	8.556	25967	18	6.517	10.508	26039	23	4.005	12.650	26111*	47	22.812	13.309	26183	12	7.870	15.380
25896	22	18.085	8.941	25968	14	6.518	10.734	26040	13	4.170	12.711	26112	30	22.914	13.988	26184	17	7.914	15.041
25897	25	18.114	8.750	25969	43	7.148	10.292	26041	12	4.500	12.420	26113	14	22.951	13.912	26185	11	8.058	15.462
25898	26	18.424	8.193	25970	38	8.391	10.314	26042	19	4.974	12.819	26114	11	23.907	13.896	26186	14	8.623	15.507
25899	34	19.232	8.046	25971	13	8.646	10.784	26043	21	5.006	12.560	26115	15	24.261	13.923	26187	29	8.770	15.560
25900	17	20.350	8.740	25972	12	8.776	10.549	26044	12	5.056	12.561	26116	58	25.970	13.656	26188	14	9.280	15.211
25901	10	20.916	8.302	25973	16	9.047	10.471	26045	20	5.060	12.600	26117	14	1.090	14.792	26189	18	9.675	15.036
25902	21	21.289	8.270	25974	16	9.608	10.837	26046	24	5.157	12.406	26118	12	2.411	14.744	26190	18	10.160	15.320
25903	40	21.681	8.887	25975	13	9.770	10.330	26047*	47	6.068	12.328	26119	26	2.426	14.922	26191	18	10.250	15.264
25904	15	21.934	8.212	25976	15	9.924	10.506	26048	12	6.106	12.054	26120	18	3.128	14.142	26192	21	11.065	15.172
25905	34	22.780	8.770	25977	14	11.336	10.280	26049	12	6.184	12.692	26121	11	3.338	14.751	26193	17	11.406	15.290
25906*	62	24.032	8.806	25978	18	13.330	10.010	26050	12	8.114	12.782	26122	33	3.831	14.599	26194	12	11.438	15.000
25907	12	25.920	8.610	25979	23	13.435	10.844	26051	23	8.122	12.930	26123	20	4.340	14.700	26195	20	11.866	15.355
25908	15	25.934	8.844	25980	16	13.605	10.514	26052	12	8.338	12.900	26124	12	5.220	14.596	26196	12	12.628	15.280
25909	12	0.324	9.382	25981	13	13.760	10.721	26053	13	8.416	12.479	26125	12	6.900	14.617	26197	30	13.407	15.948
25910	45	1.634	9.443	25982	21	14.174	10.31												



26208	14	18-670	15-183	26280	14	8-619	17-504	26352	17	23-980	18-589	26424	13	13-278	20-298	26496	22	0-267	22-884
26209	15	19-496	15-698	26281	28	9-090	17-806	26353*	50	24-280	18-088	26425	19	13-766	20-510	26497	35	0-628	22-954
26210	12	19-844	15-285	26282	12	9-254	17-663	26354	11	25-485	18-522	26426	30	14-404	20-989	26498	12	1-415	22-246
26211	13	21-070	15-353	26283	27	9-588	17-132	26355	26	25-870	18-816	26427	12	14-740	20-006	26499	25	2-498	22-976
26212	13	21-116	15-689	26284*	46	10-615	17-988	26356	26	0-895	19-520	26428	22	14-823	20-676	26500	22	2-876	22-428
26213	19	21-394	15-834	26285	12	10-788	17-737	26357	13	1-091	19-378	26429	12	15-304	20-492	26501	35	3-249	22-612
26214	11	21-922	15-851	26286	24	11-498	17-258	26358	25	2-292	19-123	26430	14	15-620	20-742	26502	31	3-815	22-450
26215	20	22-080	15-610	26287	25	11-741	17-406	26359	19	2-920	19-784	26431	17	15-693	20-122	26503	23	5-198	22-757
26216	13	22-390	15-820	26288*	46	12-291	17-675	26360	15	3-050	19-160	26432	18	16-107	20-302	26504	16	5-303	22-250
26217	13	23-666	15-800	26289	22	13-064	17-186	26361	15	3-353	19-088	26433	17	16-287	20-964	26505	43	5-500	22-504
26218	28	24-393	15-744	26290	12	13-587	17-618	26362	18	3-642	19-894	26434	17	16-434	20-460	26506	12	7-460	22-218
26219	13	0-158	16-025	26291	14	13-666	17-513	26363	11	4-464	19-594	26435	12	16-810	20-970	26507	21	7-964	22-668
26220	13	0-336	16-575	26292	14	16-752	17-396	26364	23	4-950	19-962	26436	11	19-942	20-290	26508	13	8-480	22-289
26221	18	0-610	16-776	26293	27	17-408	17-393	26365	23	5-307	19-414	26437	22	20-640	20-026	26509	14	9-465	22-564
26222	17	0-682	16-770	26294	23	18-837	17-388	26366	17	5-924	19-936	26438	13	21-142	20-412	26510	11	9-907	22-430
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26224	13	3-201	16-799	26296	27	21-780	17-820	26368	23	6-331	19-200	26440	20	21-958	20-013	26512	12	10-195	22-845
26225	23	3-268	16-640	26297	20	22-186	17-173	26369	14	6-720	19-192	26441	12	22-522	20-386	26513	16	10-938	22-147
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26230	19	6-302	16-796	26302*	102	24-532	17-520	26374	24	8-220	19-160	26446	30	2-408	21-530	26518	21	15-376	22-820
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26232	13	7-699	16-206	26304	22	25-560	17-884	26376	20	8-824	19-544	26448	17	3-906	21-530	26520	12	16-066	22-658
26233	13	9-274	16-800	26305	18	25-884	17-806	26377	21	9-516	19-252	26449	15	4-415	21-307	26521	13	16-148	22-850
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26237	17	13-794	16-965	26309	15	2-548	18-114	26381	23	11-416	19-060	26453	12	6-572	21-172	26525	18	18-800	22-615
26238	18	14-334	16-693	26310	12	2-650	18-229	26382	21	13-900	19-808	26454	20	6-792	21-574	26526	34	19-334	22-716
26239	19	14-800	16-762	26311	21	2-660	18-470	26383	19	14-330	19-340	26455	13	6-998	21-726	26527	17	21-084	22-447
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26242	13	16-943	16-753	26314	18	3-700	18-667	26386	14	16-388	19-958	26458	27	9-974	21-773	26530	17	23-105	22-899
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26245	15	18-420	16-236	26317*	45	4-352	18-805	26389	21	17-268	19-840	26461	31	12-166	21-479	26533	14	2-972	23-828
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26247	13	18-650	16-612	26319	20	5-794	18-526	26391	13	17-644	19-354	26463	27	12-670	21-510	26535	20	4-458	23-393
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26249	23	20-280	16-470	26321	12	6-194	18-558	26393	12	17-933	19-398	26465	32	13-184	21-661	26537	11	6-190	23-884
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26252	14	21-378	16-040	26324	12	7-030	18-600	26396	15	19-153	19-428	26468	14	14-404	21-871	26540	40	7-084	23-074
26253	12	21-852	16-982	26325	14	7-330	18-450	26397	16	20-216	19-193	26469	17	14-860	21-270	26541	15	7-124	23-592
26254	14	22-089	16-078	26326	13	7-552	18-400	26398	25	21-093	19-890	26470	22	15-266	21-710	26542	14	7-623	23-520
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26256	14	22-606	16-789	26328	14	7-884	18-474	26400	23	22-654	19-096	26472	22	15-400	21-884	26544	16	9-170	23-773
26257	21	23-974	16-385	26329	19	8-191	18-852	26401	13	25-100	19-820	26473	11	16-130	21-914	26545	19	9-496	23-228
26258	14	24-517	16-622	26330	26	8-435	18-585	26402	17	0-009	20-990	26474	22	16-236	21-186	26546	17	10-300	23-636
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26261	29	0-478	17-125	26333	15	10-828	18-340	26405	24	5-191	20-890	26477	17	17-648	21-311	26549	12	11-072	23-615
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26266	13	3-179	17-524	26338	21	13-736	18-848	26410	12	8-440	20-671	26482	13	19-270	21-915	26554	24	13-140	23-948
26267	19	3-780	17-540	26339	13	14-090	18-701	26411	24	8-696	20-422	26483	16	19-862	21-124	26555*	41	13-841	23-270
26268	20	5-094	17-542	26340	11	14-693	18-760	26412	16	8-960	20-924	26484	20	20-442	21-069	26556	11	14-500	23-840
26269	12	5-586	17-855	26341	17	14-837	18-600	26413	12	9-864	20-297	26485	13	21-041	21-200	26557			



26568	47	20.286	23.179	26640	13	9.326	25.249	26728	15	4.081	1.366	26800	9	4.401	4.146	26872	10	4.269	6.291
26569	15	21.386	23.208	26641	18	10.078	25.976	26729*	21	4.138	1.486	26801	41	4.600	4.831	26873	10	4.755	6.054
26570	18	23.948	23.544	26642	12	11.650	25.594	26730	16	4.361	1.130	26802	19	4.860	4.866	26874	14	5.416	6.310
26571	11	24.727	23.123	26643	13	12.559	25.020	26731	13	5.254	1.030	26803	10	5.266	4.180	26875	8	7.315	6.431
26572	17	25.932	23.115	26644	15	12.560	25.406	26732	8	5.333	1.392	26804	14	5.342	4.420	26876	29	7.526	6.451
26573	13	25.944	23.166	26645	18	13.161	25.998	26733	12	5.756	1.106	26805	18	5.628	4.256	26877	11	7.827	6.578
26574	13	25.981	23.218	26646	14	14.398	25.328	26734	32	6.222	1.098	26806	9	7.504	4.654	26878	9	8.346	6.774
26575	15	0.564	24.090	26647	11	15.098	25.632	26735*	70	6.767	1.656	26807	10	8.344	4.332	26879	11	8.422	6.180
26576	12	0.924	24.054	26648	15	15.950	25.676	26736	22	7.272	1.942	26808	21	8.458	4.030	26880	8	8.768	6.875
26577	16	1.146	24.268	26649	32	16.388	25.958	26737	12	8.649	1.422	26809	10	9.384	4.768	26881	25	8.966	6.154
26578*	44	1.682	24.396	26650	22	16.398	25.200	26738	25	10.627	1.850	26810	10	9.966	4.000	26882	20	10.004	6.830
26579	28	4.470	24.166	26651	14	19.410	25.700	26739	33	11.898	1.780	26811	9	10.985	4.434	26883	8	10.642	6.178
26580	12	4.658	24.198	26652	26	20.069	25.810	26740*	49	13.344	1.856	26812	8	11.028	4.494	26884	19	12.826	6.280
26581	13	5.127	24.060	26653	16	20.094	25.645	26741	12	14.540	1.957	26813	18	13.776	4.762	26885	10	13.850	6.386
26582*	45	5.140	24.486	26654	13	20.117	25.607	26742*	32	16.196	1.604	26814	12	13.942	4.469	26886	8	14.806	6.100
26583	13	6.320	24.850	26655	12	20.304	25.085	26743	28	16.956	1.587	26815	16	16.717	4.595	26887	32	16.055	6.616
26584	14	7.206	24.936	26656	20	22.889	25.310	26744	8	18.720	1.162	26816	22	16.825	4.854	26888	26	16.439	6.556
26585	38	7.250	24.915	26657	15	23.933	25.104	26745	24	19.047	1.692	26817	18	17.025	4.638	26889	8	17.047	6.148
26586	19	8.244	24.086	26658	45	24.028	25.240	26746	10	19.218	1.322	26818	11	17.242	4.872	26890	11	17.296	6.958
26587	22	8.319	24.324	26659	13	24.064	25.030	26747	11	19.858	1.002	26819	11	17.308	4.932	26891	27	18.264	6.167
26588	12	8.324	24.338	26660	14	24.580	25.186	26748*	51	19.959	1.298	26820	19	18.560	4.999	26892	11	18.598	6.204
26589	18	8.725	24.187					26749	8	21.583	1.904	26821	9	19.133	4.364	26893	11	19.447	6.914
26590*	61	9.352	24.938					26750	11	23.322	1.942	26822	10	19.169	4.232	26894	12	23.134	6.186
26591	12	10.482	24.433					26751	10	23.705	1.448	26823	12	19.637	4.325	26895	22	23.608	6.167
26592	22	10.818	24.682					26752	10	23.956	1.694	26824	13	20.846	4.978	26896	19	24.168	6.015
26593	41	10.862	24.274					26753	17	24.910	1.930	26825	32	24.467	4.040	26897	18	0.594	7.188
26594	20	11.274	24.264					26754	12	24.964	1.439	26826	15	0.330	5.160	26898	15	0.872	7.140
26595	13	11.275	24.073					26755	10	0.262	2.738	26827	12	1.641	5.661	26899	18	1.352	7.796
26596	14	11.624	24.310					26756	17	0.269	2.138	26828	31	3.413	5.732	26900	10	1.536	7.082
26597	12	11.960	24.988					26757	8	1.525	2.881	26829	14	4.671	5.088	26901	8	1.720	7.746
26598	18	12.410	24.873					26758	17	1.954	2.264	26830	11	4.732	5.208	26902	22	2.749	7.684
26599	12	12.455	24.138					26759*	50	4.396	2.235	26831	12	5.412	5.070	26903	9	3.546	7.194
26600	27	12.780	24.788					26760	9	4.710	2.169	26832	9	6.596	5.496	26904	16	5.068	7.455
26601	12	12.860	24.380					26761	10	5.040	2.289	26833	33	6.673	5.862	26905	13	7.835	7.294
26602	11	13.630	24.256					26762	27	5.182	2.585	26834	10	6.740	5.868	26906	17	8.698	7.834
26603	11	13.788	24.458					26763	31	6.554	2.407	26835	30	6.807	5.327	26907	15	9.094	7.574
26604	15	13.962	24.096					26764	19	8.912	2.889	26836	19	7.448	5.626	26908	15	9.157	7.286
26605	43	14.196	24.741					26765	13	9.338	2.657	26837	8	8.236	5.694	26909	26	9.706	7.448
26606	16	14.235	24.614					26766	24	10.348	2.300	26838	14	8.496	5.458	26910	9	10.016	7.357
26607	30	14.266	24.100					26767	11	10.476	2.793	26839	15	8.514	5.754	26911	11	10.776	7.438
26608	26	14.694	24.470					26768	33	11.679	2.946	26840	18	9.149	5.774	26912	8	13.084	7.576
26609	11	14.978	24.514					26769	12	12.084	2.190	26841	15	9.277	5.974	26913	8	13.151	7.474
26610	14	15.253	24.303					26770	28	12.164	2.465	26842	10	9.494	5.426	26914	34	14.660	7.254
26611	16	15.928	24.788					26771	10	12.262	2.384	26843	10	10.426	5.694	26915	31	14.968	7.534
26612	12	16.509	24.215					26772	21	12.415	2.150	26844	8	11.285	5.386	26916	13	15.244	7.645
26613*	76	18.500	24.460					26773	20	13.200	2.992	26845	11	11.536	5.850	26917	22	15.446	7.352
26614	12	20.154	24.480					26774	8	13.896	2.465	26846	12	12.042	5.914	26918	16	15.854	7.830
26615	28	21.422	24.898					26775	19	18.655	2.815	26847	16	12.374	5.666	26919	8	16.464	7.479
26616	29	21.454	24.140					26776	8	19.704	2.114	26848	16	13.817	5.741	26920	16	17.989	7.972
26617	17	21.764	24.964					26777	11	20.824	2.902	26849	33	13.836	5.759	26921	9	18.004	7.121
26618	22	21.806	24.984					26778	11	22.175	2.915	26850	11	14.600	5.618	26922	12	18.019	7.660
26619	21	22.434	24.472					26779	22	23.382	2.106	26851	15	15.790	5.550	26923	31	19.100	7.434
26620	20	25.010	24.992					26780	10	1.560	3.853	26852	8	16.792	5.620	26924	31	19.340	7.078
26621	16	25.150	24.890					26781	29	3.460	3.398	26853	11	17.016	5.466	26925	31	19.838	7.090
26622	23	1.499	25.446					26782	11	4.704	3.354	26854	12	17.628	5.454	26926	8	19.930	7.414
26623	12	2.390	25.621					26783	30	9.271	3.371	26855	9	18.020	5.666	26927	11	20.500	7.076
26624	21	2.888	25.968					26784	26	10.034	3.734	26856	11	19.180	5.334	26928	15	20.550	7.380
26625	23	2.894	25.062					26785	14	11.316	3.309	26857	25	19.380	5.964	26929	17	20.990	7.920
26626	11	3.116	25.779					26786	19	12.450	3.112	26858	13	22.166	5.842	26930	8	21.045	7.124
26627	13	3.520	25.754					26787	9	15.767	3.190	26859	33	22.778	5.970	26931	13	21.496	7.575
26628	11	3.816	25.879					26788	14	18.129	3.163	26860	14	23.752	5.649	26932	8	21.629	7.803
26629	12	3.936	25.310					26789	8	18.226	3.242	26861	10	1.536	6.841	26933	9	22.203	7.216
26630	12	4.797	25.174					26790	12	19.000	3.530	26862	29	2.065	6.131	26934	10	24.207	7.634
26631	13	4.841	25.630					26791	19	21.120	3.327	26863	12	2.089	6.724	26935	9	24.454	7.105
26632	14	5.179	25.754					26792	29	21.867	3.421	26864	27	2.224	6.726	26936	18	24.968	7.086
26633	34	5.220	25.414					26793	12	22.604	3.268	26865	8	2.344	6.142	26937	31	0.730	8.847
26634	31	5.458	25.394					26794	14	25.436	3.160	26866	11	3.197	6.592	26938*	51	1.976	8.871
26635	67	5.957	25.891					26795	8	3.122	4.122	26867	18	3.207	6.339	26939	12	3.867	8.650
26636	15	6.558	25.713					26796	16	3.									



26944	18	7.719	8.446	27016	8	7.817	10.184	27088	14	6.586	12.866	27160	8	3.354	14.504	27232	14	18.046	15.000
26945	15	8.090	8.954	27017	12	7.845	10.312	27089	10	6.688	12.646	27161	20	4.015	14.177	27233	9	18.364	15.610
26946	29	9.258	8.218	27018	30	8.486	10.324	27090	8	8.386	12.446	27162	17	4.424	14.656	27234	10	18.624	15.918
26947	15	9.796	8.825	27019	26	9.063	10.386	27091	20	9.155	12.014	27163	19	4.984	14.362	27235	17	19.164	15.048
26948	22	11.033	8.894	27020	21	9.162	10.656	27092	13	9.838	12.863	27164	9	5.062	14.134	27236	15	19.362	15.318
26949	10	12.578	8.742	27021*	46	11.029	10.846	27093	8	9.880	12.663	27165	36	5.658	14.174	27237	13	19.752	15.214
26950	26	14.073	8.940	27022	19	11.186	10.022	27094	9	10.236	12.515	27166	10	5.876	14.236	27238	10	20.180	15.840
26951	27	14.851	8.088	27023	13	12.615	10.896	27095	10	12.874	12.581	27167	10	6.237	14.554	27239	10	20.614	15.151
26952	8	15.816	8.830	27024	10	14.034	10.172	27096*	33	13.090	12.570	27168	9	7.944	14.201	27240	8	21.766	15.171
26953	16	16.515	8.064	27025	23	14.062	10.535	27097	17	13.960	12.443	27169	13	8.504	14.744	27241	20	22.280	15.756
26954	24	16.972	8.676	27026	14	15.950	10.894	27098	23	15.281	12.854	27170	25	8.530	14.680	27242	10	23.084	15.691
26955	8	18.662	8.834	27027	24	16.254	10.400	27099	28	15.640	12.485	27171	13	9.718	14.912	27243	12	24.332	15.066
26956	10	19.507	8.227	27028	12	16.279	10.874	27100	20	15.676	12.082	27172	8	10.182	14.417	27244	8	24.548	15.934
26957	19	19.990	8.818	27029	8	16.753	10.158	27101	8	16.016	12.266	27173	12	10.794	14.786	27245	10	0.118	16.161
26958*	62	20.048	8.566	27030	11	17.091	10.698	27102	27	16.916	12.062	27174	16	10.990	14.792	27246	13	0.310	16.208
26959	31	23.276	8.388	27031	23	17.330	10.705	27103	9	18.372	12.795	27175	16	11.015	14.845	27247	16	2.006	16.450
26960	11	23.572	8.550	27032	8	17.354	10.933	27104	10	18.484	12.924	27176	8	11.146	14.233	27248	13	2.553	16.678
26961	17	24.920	8.556	27033	19	19.678	10.483	27105	12	20.535	12.836	27177	19	12.284	14.936	27249	33	2.916	16.740
26962	10	25.898	8.998	27034	28	20.066	10.354	27106	9	21.907	12.168	27178	13	14.097	14.980	27250	25	3.902	16.146
26963	14	25.916	8.857	27035	20	21.619	10.286	27107	14	22.460	12.974	27179	12	14.302	14.534	27251	18	4.066	16.830
26964	15	0.992	9.404	27036	21	23.519	10.318	27108	31	22.675	12.853	27180	19	14.689	14.476	27252	17	5.915	16.919
26965	9	1.578	9.514	27037	9	0.546	11.445	27109	11	22.986	12.741	27181	12	16.042	14.817	27253	11	6.315	16.189
26966	8	1.918	9.390	27038	12	1.508	11.912	27110	10	24.462	12.352	27182	8	16.088	14.295	27254	30	7.662	16.876
26967	8	2.654	9.118	27039	14	2.706	11.236	27111	25	24.483	12.410	27183	33	16.206	14.724	27255	11	7.674	16.701
26968	9	3.737	9.899	27040	9	3.189	11.003	27112	38	25.280	12.208	27184	38	16.319	14.327	27256	12	8.054	16.606
26969	8	4.252	9.944	27041	9	3.804	11.983	27113	12	25.714	12.310	27185	12	16.470	14.368	27257	16	8.864	16.854
26970	9	4.766	9.752	27042	13	4.961	11.253	27114*	43	0.808	13.384	27186	23	16.984	14.190	27258	8	10.478	16.046
26971	20	5.282	9.140	27043	9	5.514	11.501	27115	10	0.956	13.986	27187	8	17.200	14.754	27259	15	10.489	16.865
26972*	31	6.400	9.112	27044	12	5.965	11.988	27116	10	1.912	13.961	27188	10	18.846	14.802	27260	10	10.649	16.352
26973*	37	6.462	9.684	27045	18	6.673	11.712	27117	12	2.266	13.982	27189	13	19.000	14.786	27261	23	11.020	16.184
26974	28	6.498	9.687	27046	8	7.586	11.504	27118*	49	3.966	13.700	27190	8	19.078	14.246	27262	10	11.980	16.048
26975	8	8.200	9.873	27047	11	8.432	11.547	27119	8	3.999	13.681	27191	12	19.500	14.157	27263	12	13.617	16.063
26976	13	9.016	9.668	27048	8	9.306	11.565	27120	10	5.582	13.735	27192	12	20.014	14.064	27264	32	13.880	16.455
26977	10	9.068	9.627	27049	8	9.582	11.500	27121	35	5.620	13.980	27193	9	20.632	14.816	27265	26	15.426	16.234
26978	9	9.564	9.200	27050	12	10.578	11.151	27122	8	5.628	13.578	27194	15	21.887	14.510	27266	32	15.439	16.226
26979	8	9.947	9.733	27051*	38	10.762	11.020	27123	10	5.774	13.450	27195	27	22.892	14.884	27267	8	15.700	16.586
26980	9	10.380	9.201	27052	10	10.927	11.800	27124	9	5.960	13.890	27196	10	22.894	14.337	27268*	39	16.862	16.730
26981	18	10.474	9.166	27053	10	11.034	11.940	27125	9	6.155	13.345	27197	32	25.668	14.194	27269	14	17.416	16.486
26982	35	11.198	9.918	27054	28	11.299	11.644	27126	10	6.222	13.255	27198	35	25.991	14.192	27270	12	18.469	16.339
26983	21	11.940	9.974	27055	22	11.680	11.064	27127	22	7.162	13.488	27199	16	0.104	15.695	27271	10	18.752	16.256
26984	10	12.743	9.056	27056	19	11.684	11.538	27128	34	8.511	13.533	27200	8	0.416	15.899	27272	8	19.036	16.488
26985	10	12.815	9.406	27057	9	12.334	11.061	27129	9	9.552	13.657	27201	8	1.192	15.176	27273	11	19.074	16.002
26986	9	13.393	9.300	27058	12	13.200	11.231	27130	31	11.155	13.340	27202	12	1.690	15.864	27274*	42	19.146	16.421
26987	10	13.642	9.706	27059	18	13.490	11.240	27131	12	11.164	13.664	27203	31	2.418	15.802	27275	34	19.957	16.354
26988	13	14.242	9.244	27060	25	13.731	11.990	27132	8	11.374	13.616	27204	8	3.604	15.064	27276	19	21.082	16.979
26989	10	14.441	9.472	27061	8	13.932	11.761	27133	10	11.888	13.678	27205	15	4.264	15.614	27277	10	21.549	16.702
26990	8	15.266	9.986	27062	15	13.936	11.780	27134	18	12.448	13.437	27206	12	5.096	15.440	27278	10	22.066	16.971
26991	12	16.571	9.216	27063*	130	14.464	11.776	27135	24	13.678	13.142	27207	23	5.132	15.649	27279	36	23.900	16.506
26992	25	16.676	9.803	27064	15	15.407	11.725	27136	8	16.362	13.907	27208	12	5.546	15.010	27280	8	25.215	16.893
26993	30	17.226	9.276	27065	11	15.525	11.738	27137	11	18.053	13.268	27209	33	7.025	15.894	27281	8	25.574	16.252
26994	9	17.956	9.040	27066	10	16.600	11.375	27138	12	18.404	13.188	27210	17	8.104	15.187	27282	15	0.224	17.254
26995	21	18.106	9.332	27067	40	17.711	11.499	27139	18	18.694	13.780	27211	18	8.638	15.404	27283	31	0.312	17.936
26996	32	18.327	9.432	27068	34	18.358	11.096	27140	21	19.972	13.336	27212	12	9.232	15.624	27284	9	0.355	17.858
26997	26	18.370	9.615	27069	8	18.406	11.622	27141	8	19.974	13.312	27213	32	10.916	15.060	27285	27	0.636	17.090
26998	12	18.598	9.742	27070	10	19.536	11.992	27142	18	20.421	13.633	27214	20	11.022	15.450	27286	37	0.800	17.254
26999	37	19.168	9.986	27071	10	19.744	11.694	27143	28	20.536	13.267	27215	25	11.160	15.938	27287*	84	2.570	17.576
27000	31	19.624	9.374	27072	13	19.779	11.174	27144	15	20.574	13.594	27216	37	11.344	15.324	27288	25	2.968	17.181
27001	21	19.670	9.474	27073	12	20.310	11.324	27145	20	21.074	13.104	27217	14	13.748	15.355	27289	24	3.608	17.930
27002	8	20.001	9.679	27074	8	21.435	11.464	27146	8	21.585	13.952	27218	14	13.774	15.832	27290	19	3.934	17.849
27003	31	20.087	9.042	27075	13	22.300	11.372	27147	30	22.954	13.081	27219	10	13.938	15.286	27291	31	4.075	17.534
27004	12	20.718	9.304	27076	10	22.460	11.954	27148*	35	23.801	13.180	27220	10	14.118	15.900	27292	14	6.060	17.962
27005	30	20.906	9.455	27077	9	22.649	11.544	27149	10	24.186	13.912	27221	8	14.646	15.328	27293	16	7.170	17.092
27006	10	22.105	9.047	27078	9	23.224	11.2												



27304	10	13.356	17.686	27376	8	9.080	19.403	27448	10	10.763	21.454	27520	15	9.256	23.834
27305	10	13.622	17.080	27377	8	12.151	19.773	27449	16	11.195	21.252	27521	30	10.098	23.814
27306	19	13.624	17.638	27378	17	12.488	19.464	27450	29	11.620	21.518	27522	39	10.130	23.226
27307*	46	13.900	17.219	27379	10	12.674	19.424	27451	22	11.667	21.539	27523	10	10.446	23.256
27308	22	14.214	17.420	27380	8	13.680	19.496	27452	12	12.210	21.218	27524	8	10.494	23.316
27309	10	14.784	17.113	27381	10	15.192	19.682	27453	12	12.574	21.003	27525	11	10.748	23.642
27310	22	15.923	17.170	27382	22	15.234	19.570	27454	11	13.045	21.594	27526	8	10.765	23.166
27311	10	16.299	17.850	27383	14	15.435	19.415	27455	13	14.584	21.185	27527	37	10.770	23.361
27312	12	16.502	17.436	27384	31	16.125	19.552	27456	11	15.492	21.600	27528	8	12.498	23.929
27313	10	16.899	17.676	27385	12	16.244	19.632	27457	36	15.524	21.346	27529	10	12.844	23.946
27314	9	17.328	17.984	27386	35	17.198	19.240	27458	17	17.098	21.544	27530	20	13.286	23.292
27315	13	17.356	17.624	27387	34	17.618	19.475	27459	15	17.182	21.604	27531	23	13.312	23.482
27316	19	18.900	17.050	27388	15	17.916	19.526	27460	25	17.969	21.600	27532	29	14.270	23.974
27317	31	19.112	17.190	27389	10	19.294	19.930	27461	8	18.250	21.494	27533	10	14.446	23.147
27318	9	19.274	17.061	27390	19	20.224	19.055	27462	34	19.877	21.133	27534	17	15.378	23.720
27319	21	20.125	17.834	27391	12	20.974	19.700	27463	8	19.900	21.611	27535*	51	16.268	23.300
27320	24	20.412	17.780	27392	23	0.030	20.098	27464	17	20.450	21.699	27536	13	16.393	23.455
27321	30	21.326	17.122	27393	26	6.416	20.394	27465	26	23.500	21.514	27537*	42	16.574	23.606
27322	10	21.744	17.475	27394	10	6.707	20.576	27466	10	23.878	21.143	27538	18	17.216	23.266
27323	15	22.644	17.984	27395	8	6.713	20.457	27467	28	25.494	21.510	27539	27	18.370	23.666
27324	9	23.250	17.324	27396	11	7.225	20.319	27468	23	25.722	21.018	27540	10	18.412	23.344
27325	13	23.458	17.953	27397	30	8.414	20.790	27469	15	1.210	22.969	27541	11	22.098	23.556
27326	10	24.660	17.758	27398	30	8.876	20.622	27470	20	1.389	22.208	27542	14	23.026	23.464
27327	23	25.694	17.778	27399	20	8.986	20.445	27471	12	5.636	22.530	27543	19	0.562	24.549
27328	11	0.040	18.826	27400	10	9.030	20.230	27472	13	6.671	22.058	27544	8	1.456	24.553
27329	14	1.592	18.022	27401	10	9.880	20.872	27473	25	6.686	22.430	27545	17	3.280	24.940
27330*	40	1.956	18.149	27402	8	10.154	20.398	27474	16	7.226	22.798	27546	10	4.258	24.334
27331	12	2.037	18.652	27403	18	10.579	20.962	27475	22	8.595	22.410	27547	11	5.682	24.738
27332*	45	2.326	18.148	27404	12	11.236	20.331	27476	25	12.283	22.826	27548	15	6.332	24.048
27333	10	3.537	18.566	27405	31	12.198	20.420	27477	27	13.086	22.279	27549	10	7.366	24.405
27334	8	3.542	18.416	27406	30	12.271	20.199	27478	8	13.892	22.710	27550*	56	7.689	24.600
27335	47	3.930	18.858	27407	15	12.335	20.859	27479	11	14.778	22.561	27551	27	8.424	24.498
27336	10	4.286	18.168	27408	18	13.248	20.300	27480	9	16.414	22.651	27552	8	8.840	24.336
27337	10	5.384	18.123	27409	10	13.624	20.633	27481*	40	16.500	22.342	27553	26	9.406	24.940
27338	10	5.595	18.886	27410	15	13.902	20.168	27482	13	16.560	22.444	27554	10	9.422	24.149
27339	14	6.313	18.520	27411	24	14.452	20.890	27483	8	17.056	22.502	27555	8	10.635	24.214
27340	10	6.982	18.702	27412	25	15.114	20.306	27484	10	17.615	22.530	27556	11	12.242	24.454
27341*	51	7.458	18.652	27413	11	15.800	20.608	27485	12	17.670	22.680	27557	12	13.654	24.952
27342	28	8.025	18.252	27414	12	16.118	20.967	27486	10	17.718	22.192	27558*	82	13.756	24.870
27343	10	8.456	18.783	27415	31	16.428	20.918	27487	22	17.840	22.858	27559	24	14.926	24.492
27344	21	9.520	18.700	27416	9	16.452	20.154	27488	35	17.927	22.485	27560	24	15.046	24.497
27345	10	10.636	18.130	27417	9	16.504	20.286	27489	8	18.872	22.600	27561	13	15.140	24.903
27346	14	10.818	18.432	27418	9	17.154	20.876	27490	8	18.964	22.520	27562	11	15.818	24.494
27347	9	10.832	18.531	27419	13	17.253	20.602	27491	20	19.692	22.638	27563	28	16.500	24.358
27348	8	12.018	18.143	27420	10	17.580	20.475	27492	25	20.070	22.476	27564	10	17.448	24.836
27349	8	12.401	18.628	27421	10	17.889	20.674	27493	10	20.414	22.027	27565	10	18.408	24.986
27350*	67	13.061	18.990	27422	10	17.936	20.842	27494	22	20.664	22.324	27566	18	19.916	24.054
27351*	44	13.426	18.747	27423	11	17.998	20.230	27495	20	20.674	22.824	27567	23	19.939	24.976
27352*	8	14.142	18.544	27424*	39	18.356	20.800	27496	11	21.492	22.840	27568	12	20.132	24.600
27353	11	15.276	18.373	27425	10	18.776	20.486	27497	25	22.224	22.993	27569*	47	21.456	24.004
27354	11	16.026	18.384	27426	20	20.138	20.982	27498	20	22.334	22.106	27570	8	22.348	24.848
27355	41	18.758	18.295	27427	10	20.806	20.894	27499	16	22.494	22.882	27571	10	23.242	24.870
27356	10	19.144	18.619	27428	10	21.373	20.899	27500	13	22.766	22.408	27572	22	24.896	24.809
27357	10	21.830	18.378	27429	9	22.530	20.076	27501	10	23.386	22.018	27573	19	1.020	25.386
27358	8	24.187	18.013	27430*	28	24.528	20.988	27502	13	23.459	22.462	27574	18	2.064	25.170
27359	22	25.818	18.615	27431	14	24.706	20.250	27503	12	23.534	22.896	27575	34	2.159	25.302
27360	31	0.498	19.726	27432	14	24.999	20.626	27504	29	23.562	22.469	27576	11	2.196	25.092
27361	24	0.716	19.171	27433	10	1.450	21.866	27505	8	24.965	22.396	27577	14	2.715	25.243
27362	8	3.024	19.834	27434	20	1.962	21.285	27506	15	25.789	22.244	27578	21	3.142	25.044
27363	9	3.116	19.012	27435	14	2.690	21.671	27507	17	2.060	23.608	27579	10	5.470	25.223
27364	13	3.170	19.869	27436*	38	3.262	21.683	27508	10	2.832	23.178	27580	10	10.678	25.275
27365	10	4.102	19.388	27437	11	3.960	21.900	27509	10	3.466	23.152	27581	29	11.386	25.143
27366	16	4.924	19.953	27438	24	4.710	21.890	27510	17	4.044	23.156	27582	12	11.846	25.409
27367	16	4.956	19.966	27439	34	6.246	21.625	27511	10	4.052	23.208	27583	12	13.384	25.007
27368	26	5.841	19.714	27440	11	6.784	21.926	27512	12	4.091	23.260	27584	13	14.798	25.160
27369*	67	6.154	19.453	27441	13	6.849	21.641	27513	9	5.374	23.803	27585	19	15.106	25.684
27370	28	6.988	19.178	27442*	37	7.802	21.914	27514	31	5.796	23.188	27586	10	15.328	25.144
27371	12	7.066	19.638	27443	21	9.320	21.450	27515	24	6.118	23.420	27587	44	18.540	25.558
27372	10	7.287	19.394	27444	8	9.340	21.707	27516	15	6.414	23.593	27588	12	19.054	25.234
27373	29	7.347	19.050	27445	32	9.554	21.378	27517	10	6.686	23.014	27589	24	24.056	25.158
27374	8	7.381	19.306	27446	10	10.271	21.127	27518	8	7.443	23.477				
27375	11	8.476	19.708	27447	21	10.714	21.488	27519	8	8.714	23.053				

R.A. 8<sup>h</sup> 12<sup>m</sup>

Plate 956 ; 1917 Jan. 22.

Provisional Constants.

A	B	C
-0.02588	+0.00514	+0.1270

D	E	F
-0.00543	-0.02584	-0.1365

Mag. = 16.3 - 1.09√d

No.	d	x	y
27601	13	1.427	0.186
27602	17	5.478	0.512
27603	10	9.474	0.311
27604	11	10.065	0.308
27605	8	11.396	0.075
27606	8	13.496	0.072
27607	18	14.770	0.708
27608	27	14.800	0.532
27609	12	15.842	0.744
27610	8	16.150	0.658
27611	20	17.350	0.061
27612	24	20.090	0.860
27613	21	21.694	0.170
27614	11	24.009	0.689
27615	10	24.588	0.679
27616	9	24.834	0.748
27617	9	25.786	0.479
27618	11	1.379	1.654
27619	8	1.612	1.920
27620	10	1.630	1.900
27621	16	2.634	1.626
27622	16	2.967	1.030
27623	13	5.890	1.872
27624	9	6.742	1.022
27625	25	7.218	1.143
27626	11	7.406	1.569
27627	11	8.363	1.872
27628	31	8.588	1.043
27629	30	9.481	1.056
27630	10	14.616	1.756
27631	15	15.568	1.121
27632	16	18.056	1.361
27633	8	18.076	1.117
27634	22	22.176	1.212
27635	21	22.927	1.496
27636	12	24.550	1.695
27637	14	25.806	1.646
27638	11	1.000	2.156
27639	15	1.064	2.319
27640	18	2.590	2.117
27641	23	3.998	2.463
27642	18	4.240	2.948
27643	8	4.596	2.727
27644	13	4.686	2.535
27645	22	4.808	2.512
27646	18	4.916	2.384
27647	14	7.296	2.450
27648	8	8.174	2.895
27649	8	9.830	2.705
27650	35	11.404	2.270
27651	23	11.542	2.140
27652	10	11.706	2.208
27653	8	11.781	2.858
27654	11	11.848	2.864
27655	11	11.866	2.770



27656	8	14.704	2.037	27728	10	21.670	5.768	27800	23	22.924	7.335	27872	10	4.055	10.334	27944	13	3.546	12.488
27657*	41	16.984	2.341	27729	11	21.670	5.982	27801	11	23.506	7.520	27873	10	4.203	10.012	27945	10	4.406	12.165
27658	8	17.023	2.896	27730	11	22.447	5.217	27802	10	25.002	7.342	27874	10	4.698	10.882	27946	16	4.966	12.089
27659	12	17.726	2.781	27731	10	23.585	5.828	27803	13	25.045	7.617	27875	14	7.302	10.072	27947	12	7.126	12.190
27660	10	17.743	2.352	27732	9	24.284	5.676	27804*	45	25.244	7.799	27876	10	7.590	10.432	27948	8	7.218	12.520
27661	19	18.052	2.187	27733	13	24.515	5.250	27805	8	25.801	7.316	27877	9	7.987	10.141	27949	21	7.983	12.298
27662*	44	20.511	2.550	27734	32	0.512	6.190	27806	31	1.049	8.602	27878	11	8.898	10.642	27950	14	8.336	12.534
27663	24	20.878	2.521	27735	11	0.873	6.404	27807	10	1.349	8.762	27879	12	9.599	10.956	27951	10	9.954	12.145
27664	25	22.506	2.996	27736	21	1.345	6.376	27808	10	1.960	8.732	27880	26	11.737	10.384	27952	8	10.246	12.900
27665	9	23.088	2.032	27737	17	1.906	6.218	27809	9	2.162	8.429	27881	20	12.140	10.855	27953	10	10.358	12.035
27666	13	0.302	3.493	27738	9	2.122	6.196	27810	9	2.279	8.512	27882	9	13.410	10.094	27954	11	11.444	12.008
27667	20	3.130	3.340	27739	34	3.936	6.434	27811	18	2.696	8.747	27883*	43	13.902	10.802	27955	12	11.675	12.943
27668	11	4.124	3.606	27740	16	5.452	6.452	27812	10	4.262	8.940	27884	23	14.192	10.548	27956	22	12.109	12.777
27669	13	5.901	3.939	27741	16	7.816	6.088	27813*	40	6.060	8.681	27885	24	14.332	10.628	27957	9	12.509	12.902
27670	11	7.074	3.378	27742	22	8.011	6.610	27814	28	6.420	8.650	27886	10	14.876	10.392	27958	9	13.196	12.002
27671	35	8.574	3.224	27743	11	9.086	6.071	27815	12	7.554	8.572	27887*	39	16.150	10.268	27959	10	16.938	12.296
27672	13	8.729	3.325	27744	14	9.709	6.548	27816	12	7.672	8.333	27888	10	16.156	10.670	27960	29	17.811	12.464
27673	11	9.186	3.527	27745	10	12.186	6.406	27817	11	7.846	8.002	27889	8	17.352	10.167	27961	33	18.779	12.126
27674	9	9.311	3.867	27746	11	12.830	6.192	27818	11	8.500	8.261	27890	10	18.073	10.760	27962	10	18.863	12.560
27675*	42	13.015	3.957	27747	27	12.852	6.400	27819	10	8.551	8.953	27891	8	18.604	10.424	27963	13	19.576	12.774
27676	8	14.348	3.390	27748	17	12.930	6.153	27820	10	9.339	8.098	27892	10	19.186	10.178	27964	18	20.364	12.332
27677	12	15.677	3.180	27749	29	13.136	6.070	27821	12	9.452	8.786	27893	11	20.317	10.540	27965	10	22.244	12.023
27678	12	16.384	3.697	27750	14	15.056	6.810	27822	19	10.294	9.850	27894	34	21.430	10.488	27966	12	23.304	12.996
27679	12	18.964	3.187	27751*	34	15.722	6.349	27823	25	10.311	8.865	27895	14	22.150	10.774	27967	11	0.302	13.202
27680	10	19.836	3.016	27752	11	17.044	6.057	27824	12	10.676	8.556	27896	16	22.858	10.068	27968	30	0.514	13.078
27681	15	19.922	3.713	27753	30	17.148	6.292	27825	9	12.750	8.082	27897	17	24.498	10.047	27969	35	0.795	13.300
27682	12	20.655	3.898	27754	32	17.346	6.854	27826*	33	12.908	8.700	27898	13	25.727	10.481	27970*	40	1.734	13.385
27683	8	22.728	3.138	27755	11	18.269	6.448	27827	11	13.154	8.249	27899	12	0.120	11.600	27971	10	2.062	13.388
27684	10	23.218	3.972	27756	33	18.315	6.238	27828	8	13.314	8.872	27900	11	1.042	11.431	27972	40	2.490	13.862
27685	36	2.175	4.234	27757	23	21.399	6.180	27829	17	14.488	8.610	27901	13	2.598	11.344	27973	9	2.630	13.338
27686	10	3.345	4.134	27758	21	23.204	6.145	27830	31	15.588	8.844	27902	35	2.907	11.758	27974	40	3.192	13.686
27687	11	5.262	4.112	27759	10	24.907	6.454	27831*	52	15.864	8.317	27903	33	3.702	11.853	27975	18	5.606	13.282
27688	22	6.002	4.032	27760	10	25.353	6.302	27832	9	17.114	8.068	27904	14	4.118	11.569	27976	12	5.922	13.666
27689	11	7.878	4.054	27761	10	1.968	7.832	27833	11	17.229	8.348	27905	10	5.165	11.258	27977	13	6.276	13.468
27690	8	8.440	4.349	27762	12	2.210	7.303	27834	8	18.514	8.358	27906	30	5.271	11.387	27978	19	7.702	13.030
27691	20	9.081	4.645	27763	10	2.438	7.228	27835	20	20.523	8.522	27907	9	5.407	11.430	27979*	34	9.026	13.490
27692	13	9.700	4.800	27764	23	2.721	7.274	27836	30	20.570	8.406	27908	18	5.578	11.700	27980	12	9.484	13.748
27693	8	13.352	4.885	27765	9	2.842	7.200	27837	17	23.558	8.025	27909	8	6.280	11.142	27981	10	9.611	13.099
27694	11	14.598	4.156	27766	10	4.391	7.278	27838	19	23.867	8.370	27910	9	6.530	11.931	27982	16	11.086	13.251
27695	18	15.231	4.586	27767	10	4.548	7.472	27839	16	25.728	8.996	27911	20	6.906	11.667	27983	10	11.350	13.380
27696	19	15.904	4.472	27768*	44	4.678	7.332	27840	8	3.566	9.163	27912	17	8.035	11.555	27984	8	11.517	13.409
27697*	38	16.490	4.696	27769	10	5.692	7.470	27841	18	3.678	9.171	27913	10	10.007	11.098	27985*	46	11.532	13.662
27698	12	17.332	4.930	27770	10	6.118	7.050	27842	16	3.699	9.030	27914	9	10.627	11.320	27986	25	12.029	13.453
27699	13	18.778	4.419	27771	10	6.126	7.964	27843*	41	4.070	9.240	27915	11	11.016	11.150	27987	11	12.542	13.067
27700	22	19.262	4.101	27772	26	8.652	7.042	27844	18	5.662	9.696	27916	12	11.746	11.776	27988	8	14.355	13.678
27701	21	20.962	4.185	27773	8	8.683	7.446	27845	9	7.206	9.701	27917	39	11.811	11.117	27989	18	16.686	13.196
27702	24	22.446	4.306	27774	9	8.962	7.390	27846	10	7.722	9.628	27918	29	13.200	11.662	27990	10	18.596	13.712
27703	11	23.886	4.015	27775	10	9.154	7.574	27847*	33	8.306	9.080	27919	17	13.844	11.298	27991	23	19.894	13.508
27704	13	1.484	5.857	27776*	38	10.610	7.576	27848	9	9.980	9.800	27920	30	13.936	11.748	27992	10	21.297	13.852
27705	9	4.984	5.457	27777	17	11.486	7.203	27849	11	10.153	9.564	27921	13	14.069	11.270	27993	20	21.592	13.773
27706	23	5.070	5.800	27778	10	12.036	7.152	27850	16	10.189	9.377	27922	8	14.591	11.697	27994	20	22.664	13.656
27707	10	5.556	5.570	27779	9	14.260	7.183	27851	9	10.222	9.032	27923	15	14.984	11.366	27995	20	22.904	13.330
27708	20	6.510	5.068	27780	9	14.360	7.422	27852	13	10.802	9.858	27924	13	14.998	11.216	27996	29	23.680	13.240
27709	9	8.554	5.612	27781	10	14.458	7.140	27853	16	11.720	9.921	27925	27	17.900	11.926	27997	23	24.018	13.732
27710	10	9.512	5.752	27782	30	14.962	7.070	27854*	30	12.862	9.424	27926	8	17.978	11.740	27998	25	24.796	13.818
27711	11	10.050	5.054	27783	9	14.970	7.424	27855	9	15.164	9.495	27927	11	17.990	11.494	27999	15	25.447	13.376
27712	12	11.791	5.068	27784	30	15.424	7.040	27856	20	16.074	9.694	27928	15	18.514	11.654	28000	33	25.849	13.367
27713	32	11.900	5.986	27785	17	16.129	7.812	27857	10	18.614	9.450	27929	10	18.529	11.271	28001	10	0.756	14.558
27714	13	12.046	5.570	27786	16	16.827	7.546	27858	24	18.711	9.689	27930	15	18.640	11.859	28002	11	2.044	14.114
27715	13	12.288	5.824	27787	10	17.019	7.942	27859*	35	18.898	9.008	27931	10	19.430	11.881	28003*	39	3.530	14.372
27716	10	12.370	5.770	27788	21	17.066	7.809	27860*	37	20.144	9.348	27932	8	20.519	11.994	28004*	43	3.852	14.362
27717	10	12.910	5.777	27789	12	17.774	7.878	27861	13	21.210	9.633	27933	24	20.580	11.608	28005	11	4.900	14.958
27718	10	14.583	5.224	27790	14	18.334	7.858	27862	13	21.392	9.466	27934	31	21.300	11.712	28006	20	5.012	14.610



28016	10	10.764	14.320	28088	13	23.114	16.562	28160	9	21.197	18.656	28232	27	5.685	21.844	28304	8	3.025	23.096
28017	17	10.973	14.492	28089	12	25.938	16.340	28161	32	22.398	18.140	28233	11	6.165	21.464	28305	14	5.216	23.610
28018	8	12.230	14.854	28090	10	1.158	17.538	28162	12	22.588	18.826	28234	8	7.968	21.852	28306	8	5.748	23.860
28019	32	15.264	14.369	28091	12	2.576	17.950	28163	14	23.664	18.574	28235	10	7.981	21.094	28307	22	5.822	23.466
28020	17	21.500	14.424	28092	32	3.612	17.954	28164	28	23.872	18.280	28236	12	8.119	21.028	28308	10	7.511	23.057
28021	11	21.719	14.508	28093	12	5.066	17.308	28165	9	3.853	19.097	28237	27	11.306	21.021	28309	31	7.550	23.624
28022	9	22.734	14.307	28094	32	5.124	17.820	28166	36	4.977	19.704	28238	51	11.399	21.290	28310	8	10.189	23.327
28023	10	23.968	14.615	28095	8	6.750	17.144	28167	20	6.732	19.898	28239	11	12.653	21.808	28311	8	10.745	23.438
28024	16	0.164	15.986	28096	10	8.234	17.768	28168	33	7.294	19.050	28240	12	14.650	21.708	28312	17	10.952	23.912
28025	30	0.761	15.105	28097	11	9.760	17.640	28169	29	7.668	19.411	28241	31	14.921	21.720	28313	34	11.262	23.703
28026	10	0.968	15.909	28098	34	10.180	17.821	28170	13	11.708	19.490	28242	10	15.216	21.692	28314	10	11.431	23.140
28027	12	2.206	15.263	28099	36	10.676	17.072	28171	9	12.127	19.728	28243	19	15.538	21.854	28315	10	14.004	23.084
28028	13	4.926	15.281	28100	11	10.712	17.257	28172	19	12.134	19.441	28244	10	15.556	21.172	28316	27	14.376	23.659
28029	32	4.994	15.206	28101	10	11.900	17.216	28173	41	13.806	19.660	28245	12	17.327	21.462	28317	8	15.704	23.322
28030	8	5.380	15.178	28102	29	12.406	17.176	28174	22	14.982	19.628	28246	10	17.684	21.640	28318	30	16.317	23.448
28031	11	8.206	15.588	28103	24	13.080	17.194	28175	17	16.363	19.138	28247	11	17.936	21.736	28319	41	18.156	23.685
28032	21	11.041	15.526	28104	10	13.141	17.967	28176	10	16.556	19.606	28248	9	19.843	21.923	28320	21	18.183	23.718
28033	16	11.530	15.800	28105	27	13.223	17.434	28177	8	17.418	19.056	28249	13	20.341	21.412	28321	41	18.240	23.842
28034	31	11.826	15.916	28106	8	15.060	17.664	28178	10	17.598	19.334	28250	15	21.315	21.474	28322	8	18.320	23.541
28035	8	12.230	15.900	28107	36	17.850	17.874	28179	10	19.854	19.578	28251	38	21.972	21.909	28323	31	20.630	23.040
28036	31	13.092	15.438	28108	8	19.261	17.670	28180	10	20.427	19.916	28252	11	22.588	21.060	28324	10	20.834	23.667
28037	29	13.118	15.756	28109	10	20.065	17.971	28181	12	21.495	19.046	28253	33	22.590	21.292	28325	10	21.628	23.450
28038	18	13.138	15.298	28110	8	21.509	17.625	28182	10	21.612	19.606	28254	43	23.768	21.480	28326	10	21.665	23.388
28039	18	14.088	15.880	28111	8	22.260	17.370	28183	26	21.956	19.820	28255	12	24.122	21.690	28327	10	21.840	23.389
28040	8	14.736	15.342	28112	8	22.462	17.932	28184	20	24.472	19.116	28256	11	25.847	21.978	28328	44	22.970	23.616
28041	8	15.068	15.433	28113	10	23.111	17.749	28185	14	25.169	19.698	28257	15	0.318	22.333	28329	10	4.354	24.376
28042	11	16.133	15.369	28114	40	23.134	17.480	28186	8	0.481	20.302	28258	10	0.753	22.628	28330	10	4.581	24.068
28043	9	17.704	15.934	28115	11	23.204	17.190	28187	11	1.472	20.260	28259	12	1.368	22.230	28331	15	4.789	24.106
28044	30	19.559	15.634	28116	8	24.890	17.568	28188	10	2.140	20.494	28260	14	1.448	22.674	28332	32	6.802	24.514
28045	13	19.900	15.244	28117	13	24.965	17.800	28189	16	2.660	20.443	28261	9	1.510	22.143	28333	36	8.446	24.719
28046	12	20.642	15.058	28118	13	0.561	18.209	28190	20	2.961	20.814	28262	26	1.548	22.678	28334	10	9.464	24.134
28047	10	20.787	15.286	28119	13	1.376	18.166	28191	12	5.783	20.419	28263	12	2.956	22.584	28335	20	10.952	24.716
28048	14	21.602	15.870	28120	8	3.284	18.040	28192	8	5.784	20.197	28264	16	3.778	22.420	28336	16	11.389	24.188
28049	24	21.684	15.522	28121	28	3.748	18.790	28193	11	7.926	20.030	28265	12	3.991	22.157	28337	10	11.498	24.773
28050	8	25.788	15.899	28122	10	4.032	18.540	28194	8	8.317	20.088	28266	10	5.068	22.484	28338	9	11.988	24.715
28051	39	1.795	16.710	28123	9	4.110	18.688	28195	28	8.848	20.010	28267	11	6.538	22.397	28339	37	13.118	24.919
28052	11	2.434	16.130	28124	11	4.858	18.320	28196	9	9.140	20.846	28268	13	6.866	22.880	28340	11	13.430	24.052
28053	8	2.779	16.658	28125	12	5.062	18.996	28197	10	9.460	20.022	28269	8	7.682	22.473	28341	35	13.684	24.655
28054	11	3.469	16.432	28126	9	5.482	18.539	28198	22	9.992	20.554	28270	8	7.845	22.303	28342	23	14.038	24.858
28055	8	3.575	16.650	28127	35	5.924	18.352	28199	11	10.053	20.510	28271	13	8.682	22.804	28343	10	14.629	24.016
28056	9	4.028	16.852	28128	11	6.176	18.936	28200	8	10.272	20.694	28272	9	8.834	22.486	28344	10	15.592	24.276
28057	14	4.092	16.782	28129	8	6.935	18.142	28201	9	10.395	20.918	28273	13	9.342	22.340	28345	14	15.925	24.299
28058	11	4.753	16.770	28130	9	7.551	18.062	28202	8	10.697	20.818	28274	27	9.462	22.096	28346	16	16.824	24.902
28059	9	4.835	16.730	28131	8	7.574	18.326	28203	30	11.190	20.616	28275	20	10.332	22.443	28347	10	17.136	24.216
28060	44	5.730	16.684	28132	8	9.524	18.560	28204	10	11.644	20.520	28276	10	10.754	22.462	28348	10	18.439	24.492
28061	42	6.168	16.742	28133	10	9.974	18.021	28205	18	11.808	20.450	28277	16	10.774	22.151	28349	10	19.312	24.238
28062	30	6.198	16.372	28134	29	10.070	18.928	28206	15	11.836	20.224	28278	19	11.085	22.308	28350	13	19.857	24.594
28063	8	6.293	16.795	28135	10	10.329	18.912	28207	8	11.943	20.836	28279	14	12.062	22.566	28351	30	20.034	24.562
28064	8	6.566	16.180	28136	10	11.103	18.737	28208	8	11.969	20.692	28280	16	12.954	22.389	28352	38	20.478	24.238
28065	41	6.642	16.503	28137	11	11.659	18.195	28209	34	12.170	20.894	28281	10	13.624	22.678	28353	12	22.292	24.530
28066	47	7.141	16.270	28138	32	12.048	18.340	28210	10	12.253	20.667	28282	41	15.010	22.161	28354	9	22.672	24.434
28067	29	9.326	16.950	28139	15	12.273	18.416	28211	9	12.388	20.080	28283	10	15.641	22.838	28355	10	0.374	25.078
28068	8	9.873	16.620	28140	14	12.868	18.371	28212	42	12.850	20.931	28284	26	15.973	22.159	28356	8	0.376	25.826
28069	9	10.030	16.512	28141	13	14.037	18.180	28213	29	13.456	20.460	28285	12	16.352	22.345	28357	12	1.272	25.084
28070	10	10.520	16.660	28142	9	14.218	18.687	28214	16	13.843	20.217	28286	8	16.515	22.322	28358	22	2.088	25.360
28071	12	10.528	16.485	28143	15	15.098	18.780	28215	14	14.950	20.560	28287	10	16.680	22.459	28359	20	2.921	25.002
28072	11	11.826	16.401	28144	11	15.495	18.466	28216	30	16.002	20.860	28288	10	16.750	22.979	28360	11	3.572	25.278
28073	25	12.298	16.505	28145	19	15.658	18.100	28217	12	16.191	20.570	28289	8	17.306	22.264	28361	21	4.892	25.668
28074	12	12.388	16.002	28146	10	16.221	18.060	28218	42	18.590	20.040	28290	42	17.461	22.752	28362	10	5.761	25.527
28075	21	12.658	16.203	28147	14	16.804	18.088	28219	14	19.036	20.470	28291	8	18.984	22.008	28363	10	11.785	25.150
28076	18	12.751	16.442	28148	10	16.867	18.814	28220	10	22.740	20.313	28292	8	19.052	22.120	28364	25	13.293	25.955
28077	18	13.537	16.698	28149	15	17.065	18.050	28221	11	23.327	20.858	28293	8	19.672	22.517	28365	9	14.088	25.592
28078																			



R.A. 8<sup>h</sup> 20<sup>m</sup>

Plate 957; 1917 Jan. 22.

Provisional Constants.

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-00901 -02581 -0420

Mag. = 15.7 - 1.09√d

No.	d	x	y	28471	9	5.542	4.820	28543	12	2.912	7.529	28615	9	14.756	9.394	28687*	40	2.716	12.178
28401	12	1.822	0.892	28472	10	5.545	4.046	28544	11	2.956	7.804	28616	20	16.000	9.374	28688	12	4.607	12.325
28402	10	2.402	0.873	28473	16	6.114	4.220	28545*	40	3.154	7.981	28617	12	17.168	9.326	28689	22	5.218	12.472
28403	12	2.646	0.940	28474	24	7.120	4.904	28546	8	3.709	7.492	28618	10	17.282	9.350	28690	10	5.866	12.814
28404	12	3.596	0.655	28475	21	7.275	4.640	28547	21	4.175	7.490	28619	8	17.828	9.427	28691	20	6.090	12.100
28405	18	7.766	0.675	28476	11	7.401	4.388	28548	16	4.203	7.930	28620	13	19.850	9.322	28692	9	7.174	12.817
28406	13	9.564	0.152	28477	9	7.622	4.450	28549	9	4.292	7.479	28621	8	21.160	9.922	28693	19	7.370	12.307
28407	17	13.306	0.548	28478	23	8.565	4.062	28550	8	4.436	7.076	28622	8	21.526	9.882	28694	12	10.376	12.528
28408	17	14.772	0.148	28479	11	10.458	4.442	28551	13	4.681	7.836	28623	10	22.790	9.544	28695*	30	10.459	12.600
28409	11	15.916	0.384	28480	15	10.956	4.550	28552	9	5.187	7.475	28624	8	25.392	9.712	28696	10	13.311	12.240
28410	28	19.264	0.544	28481*	30	11.336	4.095	28553*	32	6.840	7.434	28625	12	0.805	10.288	28697	17	15.308	12.932
28411	8	21.097	0.898	28482	8	12.310	4.650	28554	16	6.846	7.740	28626	14	2.447	10.242	28698*	24	17.080	12.428
28412	10	22.926	0.405	28483	8	12.342	4.438	28555	11	8.004	7.965	28627	11	2.590	10.074	28699	17	18.500	12.960
28413	20	0.752	1.716	28484	10	15.326	4.066	28556	8	8.058	7.431	28628	12	3.683	10.657	28700*	23	18.592	12.318
28414	12	2.379	1.888	28485	9	18.699	4.598	28557	13	9.662	7.765	28629	9	3.802	10.045	28701	9	21.740	12.942
28415	20	3.632	1.820	28486	8	19.154	4.383	28558	11	13.336	7.688	28630	9	4.723	10.104	28702	9	23.188	12.936
28416	32	4.817	1.304	28487	11	19.704	4.041	28559	8	13.980	7.657	28631	12	5.261	10.607	28703	10	24.727	12.204
28417	9	6.764	1.316	28488	10	20.489	4.147	28560	19	15.954	7.338	28632	11	5.872	10.684	28704	17	0.665	13.876
28418	19	12.164	1.208	28489	10	21.735	4.204	28561	8	19.894	7.300	28633	20	7.088	10.490	28705	16	0.900	13.546
28419	10	14.645	1.415	28490	22	22.074	4.734	28562	10	20.515	7.584	28634	8	8.186	10.934	28706	10	1.298	13.206
28420	15	16.025	1.370	28491	16	22.286	4.142	28563	8	21.270	7.824	28635	9	8.348	10.116	28707	21	1.674	13.446
28421	14	16.298	1.776	28492	11	22.968	4.291	28564	11	22.456	7.932	28636	14	8.675	10.053	28708	16	2.020	13.934
28422	10	17.138	1.034	28493	9	25.384	4.972	28565	20	22.589	7.866	28637	24	10.338	10.057	28709	12	3.444	13.555
28423	10	17.316	1.615	28494	8	0.322	5.443	28566	12	23.097	7.600	28638	11	11.362	10.504	28710*	21	3.846	13.540
28424	18	18.794	1.133	28495	13	2.393	5.416	28567	13	23.634	7.754	28639*	45	11.968	10.316	28711	24	4.142	13.452
28425	10	20.535	1.412	28496	10	4.535	5.210	28568	9	25.526	7.185	28640	12	12.776	10.688	28712*	32	4.280	13.504
28426	25	22.210	1.123	28497	10	6.986	5.180	28569	8	0.082	8.558	28641	8	12.846	10.118	28713	11	4.506	13.195
28427	12	22.898	1.894	28498	10	7.598	5.435	28570	14	1.475	8.234	28642	8	13.786	10.773	28714	10	5.010	13.354
28428	8	24.254	1.646	28499	8	8.018	5.871	28571	12	1.790	8.574	28643	10	13.887	10.602	28715	8	5.084	13.728
28429	11	24.296	1.289	28500*	29	8.939	5.458	28572	12	4.962	8.522	28644	9	13.973	10.258	28716	10	5.964	13.338
28430	9	3.122	2.418	28501*	37	9.453	5.313	28573	8	7.120	8.216	28645	9	14.650	10.965	28717	10	5.974	13.277
28431	10	3.636	2.923	28502	20	10.818	5.358	28574	11	8.586	8.426	28646	13	16.141	10.946	28718	14	6.073	13.348
28432	8	4.198	2.392	28503	9	11.430	5.185	28575	10	9.258	8.616	28647*	40	16.700	10.564	28719	11	9.672	13.026
28433	10	4.681	2.310	28504	8	13.836	5.580	28576*	50	9.604	8.204	28648	9	17.710	10.050	28720	15	10.032	13.966
28434	12	6.205	2.827	28505*	40	14.154	5.794	28577	9	9.820	8.082	28649	10	18.060	10.337	28721	20	10.298	13.370
28435	11	6.808	2.146	28506	14	15.114	5.862	28578	12	10.330	8.562	28650	15	18.266	10.532	28722	10	11.155	13.062
28436	19	7.400	2.920	28507	8	16.596	5.534	28579	10	10.672	8.900	28651	9	18.500	10.254	28723	9	11.202	13.024
28437	10	8.701	2.989	28508	9	17.551	5.775	28580	17	10.749	8.458	28652	9	18.974	10.884	28724	11	12.390	13.773
28438	12	10.189	2.290	28509	12	18.421	5.834	28581	9	11.047	8.390	28653	17	19.081	10.542	28725	12	12.701	13.765
28439	16	10.586	2.665	28510	10	18.642	5.930	28582	8	11.984	8.950	28654*	18	19.092	10.550	28726	8	14.468	13.540
28440	13	11.389	2.061	28511*	34	19.376	5.406	28583	10	14.510	8.859	28655	10	20.103	10.672	28727	10	14.938	13.067
28441	10	12.375	2.903	28512	10	20.950	5.664	28584	8	15.612	8.865	28656	23	20.164	10.978	28728	14	18.133	13.982
28442	23	13.516	2.334	28513	10	22.162	5.914	28585	21	16.008	8.366	28657	8	20.250	10.801	28729	22	18.190	13.307
28443	10	14.001	2.609	28514	16	22.632	5.199	28586	11	16.558	8.080	28658	9	20.511	10.246	28730	20	18.980	13.264
28444	8	14.805	2.116	28515	16	23.326	5.020	28587	20	16.852	8.894	28659	10	23.402	10.835	28731	15	19.380	13.838
28445	8	16.149	2.610	28516	9	24.740	5.118	28588	11	18.238	8.466	28660	8	23.541	10.633	28732	16	19.493	13.858
28446	33	16.376	2.364	28517	20	1.093	6.360	28589	10	18.841	8.910	28661	22	24.227	10.276	28733	10	20.360	13.906
28447	8	17.012	2.249	28518	9	1.472	6.035	28590*	32	19.662	8.159	28662	12	24.231	10.250	28734	9	20.581	13.999
28448	12	20.610	2.600	28519	8	2.130	6.167	28591	12	20.646	8.753	28663	8	25.900	10.769	28735	19	20.654	13.800
28449	13	20.904	2.605	28520	10	2.802	6.644	28592	17	22.594	8.382	28664	11	0.268	11.783	28736	14	23.324	13.720
28450	10	21.836	2.423	28521	9	3.246	6.484	28593	9	23.362	8.264	28665	9	2.451	11.480	28737	8	23.412	13.716
28451	14	22.906	2.520	28522	24	5.250	6.046	28594	9	25.929	8.892	28666	28	3.174	11.858	28738*	26	23.821	13.762
28452	20	24.2																	



28744	8	5.646	14.115	28816	10	10.044	17.718	28888	18	14.184	20.394	28960	9	8.346	23.900
28745	12	6.015	14.052	28817*	25	10.392	17.593	28889	15	15.380	20.576	28961	10	8.564	23.872
28746	17	7.877	14.898	28818	16	10.976	17.283	28890*	30	16.806	20.168	28962	11	9.722	23.188
28747	9	16.260	14.524	28819	11	11.924	17.946	28891	10	16.953	20.681	28963	23	11.436	23.846
28748	9	16.367	14.061	28820	20	11.948	17.606	28892	9	19.430	20.673	28964	8	11.681	23.919
28749	8	16.610	14.730	28821	16	12.350	17.160	28893	8	19.450	20.420	28965	14	12.166	23.814
28750	20	16.734	14.619	28822	11	13.614	17.860	28894	21	20.938	20.164	28966	10	12.482	23.482
28751	8	16.880	14.270	28823	8	13.888	17.723	28895	10	21.060	20.974	28967	15	12.686	23.386
28752	10	17.150	14.112	28824	8	14.133	17.698	28896	12	21.464	20.240	28968	8	12.718	23.050
28753	10	19.947	14.513	28825	9	14.472	17.304	28897	8	21.475	20.854	28969	16	15.568	23.136
28754	9	21.036	14.334	28826	12	17.246	17.758	28898	15	21.492	20.520	28970	21	17.454	23.660
28755	15	22.365	14.562	28827	9	20.834	17.830	28899	9	24.006	20.863	28971	9	17.760	23.450
28756	12	22.958	14.124	28828	20	20.923	17.851	28900	10	0.701	21.281	28972	10	19.913	23.750
28757	10	23.498	14.634	28829	8	21.480	17.593	28901	28	0.704	21.514	28973	10	20.271	23.186
28758	11	23.611	14.918	28830	32	24.140	17.688	28902	9	1.437	21.069	28974	12	20.614	23.610
28759	9	3.770	15.090	28831	25	24.462	17.552	28903*	41	1.882	21.686	28975	13	21.131	23.332
28760*	40	4.346	15.365	28832	10	24.598	17.940	28904	9	2.040	21.245	28976	10	23.000	23.340
28761	14	5.126	15.428	28833	17	25.357	17.850	28905	10	2.246	21.888	28977	8	24.765	23.904
28762	9	5.180	15.578	28834	14	25.984	17.368	28906	11	2.796	21.006	28978	33	25.456	23.155
28763	9	6.928	15.749	28835	21	0.461	18.364	28907*	70	4.490	21.516	28979	11	0.460	24.756
28764	15	8.456	15.475	28836	10	1.740	18.780	28908	11	5.565	21.164	28980	9	0.838	24.654
28765	12	8.754	15.220	28837	20	1.941	18.483	28909	10	5.676	21.970	28981	24	4.278	24.761
28766	9	9.651	15.772	28838	12	4.242	18.245	28910	10	5.822	21.166	28982	23	4.932	24.985
28767	9	9.734	15.846	28839	8	5.725	18.780	28911*	37	5.994	21.560	28983	13	5.802	24.596
28768	8	12.158	15.700	28840	12	7.714	18.834	28912	12	6.224	21.664	28984	10	6.100	24.866
28769	12	12.470	15.751	28841	11	7.864	18.308	28913	12	8.316	21.777	28985	10	6.150	24.176
28770	11	12.690	15.076	28842	9	8.540	18.306	28914	20	9.430	21.088	28986	22	8.909	24.253
28771	10	17.349	15.300	28843	14	9.061	18.610	28915*	20	10.301	21.095	28987	13	9.714	24.103
28772*	27	17.388	15.798	28844	9	9.488	18.602	28916	8	11.099	21.920	28988	11	10.600	24.641
28773	8	18.545	15.466	28845	21	10.920	18.204	28917	8	11.250	21.754	28989	10	10.633	24.106
28774	10	18.865	15.198	28846	10	12.301	18.300	28918	10	11.675	21.680	28990	8	11.638	24.240
28775	9	19.594	15.060	28847	8	12.501	18.110	28919	9	15.330	21.910	28991	12	13.015	24.671
28776	9	20.290	15.256	28848	8	15.290	18.472	28920	12	15.718	21.571	28992	12	13.398	24.570
28777	9	20.872	15.774	28849	17	16.108	18.568	28921	11	16.642	21.626	28993	9	13.735	24.299
28778	20	20.970	15.975	28850	21	16.183	18.460	28922	10	19.418	21.270	28994	8	14.451	24.777
28779	9	23.292	15.730	28851	11	16.840	18.175	28923	10	19.509	21.436	28995	8	14.491	24.804
28780	9	23.653	15.589	28852	20	18.726	18.005	28924	15	19.922	21.600	28996	12	16.936	24.694
28781	10	24.213	15.284	28853	8	19.309	18.115	28925	10	20.710	21.850	28997	9	17.275	24.137
28782	12	25.594	15.276	28854	10	22.060	18.216	28926	14	22.818	21.116	28998	11	17.518	24.611
28783	11	25.906	15.110	28855	10	0.668	19.048	28927	11	23.002	21.562	28999	12	19.512	24.488
28784	12	1.158	16.776	28856	16	2.556	19.310	28928	38	0.092	22.140	29000	10	20.482	24.212
28785	9	3.826	16.072	28857	15	3.260	19.881	28929	25	3.354	22.528	29001	9	21.325	24.875
28786	11	3.984	16.513	28858	24	4.978	19.181	28930	13	3.975	22.152	29002	13	24.414	24.574
28787	10	4.140	16.019	28859	12	5.051	19.529	28931*	39	5.060	22.895	29003	8	25.140	24.920
28788	12	4.562	16.927	28860	16	5.448	19.150	28932	22	5.205	22.549	29004	12	5.140	25.736
28789	10	11.128	16.802	28861	8	6.054	19.984	28933	27	6.476	22.050	29005	32	5.650	25.400
28790	13	11.981	16.084	28862	11	10.241	19.490	28934	9	6.658	22.390	29006	10	7.025	25.773
28791	9	13.383	16.962	28863	12	12.051	19.067	28935	21	7.691	22.632	29007	19	9.200	25.620
28792	9	16.013	16.978	28864	21	14.325	19.475	28936	20	8.199	22.635	29008	8	11.392	25.056
28793	12	16.632	16.192	28865	21	14.490	19.704	28937	10	9.099	22.420	29009	13	11.712	25.526
28794	21	16.940	16.379	28866	15	14.638	19.976	28938	13	11.236	22.068	29010	8	11.964	25.197
28795	9	18.892	16.631	28867	12	16.432	19.550	28939	14	11.280	22.474	29011	32	13.228	25.355
28796	8	19.707	16.735	28868	10	17.210	19.465	28940	10	11.536	22.386	29012	18	16.680	25.535
28797	14	20.090	16.788	28869	9	19.175	19.456	28941	11	11.868	22.655	29013	14	20.875	25.314
28798	9	20.640	16.600	28870	9	21.274	19.649	28942	22	13.666	22.214	29014	8	22.592	25.706
28799	9	21.008	16.181	28871	8	22.453	19.876	28943	15	14.970	22.126	29015	10	24.250	25.221
28800	11	22.306	16.010	28872	19	22.532	19.670	28944	16	16.170	22.856	29016	15	25.280	25.668
28801	20	22.406	16.657	28873	12	25.188	19.880	28945	9	16.914	22.576				
28802	11	24.887	16.300	28874	8	25.720	19.606	28946	9	17.768	22.708				
28803	9	0.318	17.597	28875	21	0.048	20.053	28947	14	19.825	22.658				
28804	9	1.171	17.964	28876	11	0.845	20.533	28948	10	20.486	22.000				
28805*	33	1.188	17.696	28877	11	2.330	20.946	28949	8	20.898	22.620				
28806	10	1.260	17.402	28878	10	3.270	20.635	28950	20	21.056	22.251				
28807	8	2.954	17.756	28879*	26	6.700	20.470	28951	17	22.126	22.623				
28808	14	3.030	17.985	28880	10	6.970	20.191	28952*	38	22.536	22.565				
28809	9	3.527	17.026	28881	13	8.552	20.006	28953	8	23.946	22.848				
28810	12	4.226	17.658	28882	21	9.095	20.184	28954*	42	1.114	23.834				
28811	10	5.181	17.746	28883	9	9.310	20.582	28955	10	4.001	23.974				
28812	10	5.906	17.775	28884	9	9.854	20.936	28956	10	4.687	23.645				
28813	11	6.761	17.226	28885*	18	13.044	20.525	28957	13	6.848	23.854				
28814*	23	7.720	17.950	28886	11	13.618	20.041	28958	22	7.012	23.972				
28815	8	8.392	17.616	28887	9	13.930	20.136	28959	12	7.424	23.004				

R.A. 8<sup>h</sup> 28<sup>m</sup>

Plate 954; 1917 Jan. 20.

Provisional Constants.

A	B	C
-02593	+00303	+0698

D	E	F
-00316	-02598	-3529

Mag. = 16.4 - 1.09√d

No.	d	x	y
29051	17	4.534	0.389
29052	27	4.931	0.030
29053	8	5.456	0.483
29054	52	6.030	0.758
29055	23	6.032	0.836
29056	27	6.929	0.532
29057	27	7.969	0.180
29058	12	9.879	0.462
29059	14	10.234	0.480
29060	23	11.112	0.750
29061	14	11.114	0.764
29062	19	12.616	0.050
29063	9	12.636	0.026
29064	12	15.148	0.033
29065	18	15.600	0.994
29066	32	18.691	0.735
29067	20	20.545	0.838
29068	32	21.399	0.770
29069	11	0.274	1.652
29070	12	0.534	1.800
29071	10	1.930	1.188
29072	9	3.323	1.776
29073	8	4.064	1.802
29074	19	6.316	1.684
29075*	48	9.188	1.722
29076	23	9.220	1.944
29077	14	11.096	1.172
29078*	67	11.214	1.166
29079	19	12.778	1.432
29080	32	14.664	1.744
29081*	37	16.540	1.718
29082	10	17.145	1.611
29083	20	17.958	1.906
29084	17	18.110	1.540
29085	32	18.686	1.056
29086	25	19.065	1.717
29087	10	19.348	1.673
29088	30	20.804	1.959
29089	25	21.575	1.572
29090	9	21.766	1.941
29091	9	23.028	1.965
29092	10	24.824	1.373
29093	11	0.546	2.426
29094	14	1.892	2.577
29095	11	5.554	2.675
29096	9	6.576	2.516
29097*	39	9.295	2.441
29098	16	11.416	2.860
29099	8	12.248	2.650
29100	20	13.950	2.701
29101	10	15.110	2.231
29102	18	15.368	2.563
29103	25	16.864	2.713
29104	14	18.444	2.682
29105	11	18.736	2.203



29815	23	7.190	6.802	29887	8	4.244	9.575	29959	14	13.770	11.937	30031	28	5.500	14.624	30103	20	13.800	16.478
29816	23	8.213	6.733	29888	26	4.450	9.272	29960	15	15.037	11.680	30032	15	6.668	14.471	30104	18	13.853	16.367
29817	8	9.488	6.222	29889	10	6.208	9.411	29961	14	15.820	11.386	30033	8	7.756	14.792	30105	16	15.425	16.451
29818*	45	9.836	6.697	29890	10	7.210	9.256	29962	14	18.293	11.798	30034	14	8.530	14.837	30106	10	16.256	16.300
29819	11	10.206	6.614	29891	10	7.999	9.170	29963	10	19.264	11.146	30035	21	9.110	14.917	30107	10	17.825	16.398
29820	10	10.377	6.112	29892	23	8.000	9.873	29964	14	21.155	11.130	30036	21	9.415	14.654	30108	13	18.670	16.628
29821	10	10.577	6.614	29893	10	10.278	9.386	29965	29	22.124	11.044	30037	11	10.542	14.956	30109	11	21.186	16.618
29822	20	10.952	6.283	29894	23	10.280	9.054	29966	25	22.135	11.265	30038	11	10.661	14.785	30110	10	21.406	16.488
29823	11	11.663	6.510	29895	12	11.610	9.240	29967	15	22.400	11.460	30039	11	12.166	14.845	30111	17	23.205	16.972
29824	16	11.764	6.014	29896	10	13.422	9.026	29968	13	22.404	11.275	30040	12	12.390	14.802	30112*	36	23.796	16.490
29825	10	12.086	6.008	29897	9	13.539	9.086	29969	11	23.579	11.386	30041	12	13.414	14.721	30113	15	2.030	17.664
29826	12	13.492	6.674	29898	8	13.958	9.192	29970	28	25.632	11.606	30042	10	13.562	14.520	30114	8	3.094	17.573
29827	21	14.008	6.982	29899	12	14.716	9.185	29971	20	0.002	12.761	30043	28	14.050	14.815	30115	11	3.420	17.988
29828	11	14.318	6.943	29900	26	14.917	9.658	29972	14	0.416	12.562	30044	11	14.164	14.648	30116	17	7.590	17.443
29829	18	17.115	6.141	29901	13	16.165	9.370	29973	19	2.576	12.932	30045	9	14.700	14.176	30117*	49	7.816	17.048
29830	11	19.427	6.816	29902	10	16.606	9.394	29974	26	3.537	12.982	30046	12	14.715	14.362	30118	28	7.836	17.052
29831	20	19.567	6.440	29903	10	17.040	9.488	29975	15	4.815	12.822	30047	19	16.100	14.006	30119	13	12.554	17.682
29832	13	20.020	6.972	29904	16	19.850	9.890	29976	10	5.050	12.994	30048	11	18.162	14.350	30120	12	12.890	17.385
29833	10	21.320	6.394	29905	12	20.131	9.389	29977	17	5.758	12.861	30049	21	18.946	14.652	30121	20	14.634	17.690
29834	10	21.775	6.592	29906	15	20.278	9.866	29978	10	7.980	12.444	30050	8	19.314	14.888	30122	9	14.765	17.293
29835	13	22.735	6.405	29907	11	20.364	9.614	29979	13	7.987	12.371	30051	11	19.502	14.758	30123	10	15.280	17.802
29836	23	23.543	6.948	29908	11	22.073	9.853	29980	19	8.445	12.454	30052	18	20.074	14.457	30124	13	16.550	17.075
29837	10	1.369	7.676	29909	21	22.946	9.822	29981	12	9.246	12.411	30053	12	21.500	14.812	30125	12	16.793	17.381
29838	23	2.330	7.562	29910*	40	23.666	9.226	29982	12	9.778	12.944	30054	14	23.142	14.370	30126	12	17.194	17.674
29839	20	2.702	7.944	29911	11	2.163	10.657	29983	10	10.165	12.237	30055	23	23.158	14.193	30127	22	18.077	17.550
29840	13	3.134	7.924	29912	11	4.150	10.776	29984	10	11.045	12.043	30056	12	23.580	14.682	30128	12	19.125	17.703
29841	19	3.558	7.574	29913	28	4.187	10.870	29985	26	11.421	12.933	30057	19	23.734	14.959	30129	11	20.643	17.209
29842	12	5.053	7.244	29914	10	4.248	10.740	29986	9	12.324	12.004	30058	10	1.485	15.995	30130	16	20.930	17.314
29843	13	5.397	7.840	29915	11	4.364	10.654	29987	9	13.491	12.230	30059	9	2.325	15.900	30131	13	22.598	17.970
29844	11	5.790	7.344	29916	9	4.747	10.484	29988	18	15.268	12.457	30060	8	3.214	15.306	30132	21	2.464	18.586
29845	10	6.526	7.936	29917	12	4.824	10.460	29989	11	15.304	12.236	30061	14	4.444	15.596	30133	31	3.233	18.174
29846	22	8.548	7.761	29918	10	5.226	10.764	29990	19	20.213	12.980	30062	11	5.363	15.887	30134	24	3.323	18.393
29847	9	8.568	7.117	29919	10	5.680	10.593	29991	10	20.815	12.480	30063	12	5.710	15.233	30135	25	3.633	18.696
29848	14	8.703	7.476	29920	16	6.765	10.843	29992	14	24.094	12.414	30064	12	5.838	15.310	30136	14	7.507	18.888
29849	13	11.186	7.986	29921	21	8.052	10.200	29993	20	0.165	13.430	30065*	26	6.867	15.461	30137	11	7.648	18.884
29850	14	11.242	7.646	29922	10	9.170	10.964	29994	18	1.008	13.250	30066	14	7.036	15.844	30138	14	10.837	18.555
29851	14	11.246	7.338	29923	10	9.290	10.478	29995	14	2.602	13.270	30067	14	9.717	15.940	30139	16	11.602	18.538
29852	19	11.544	7.007	29924*	42	12.862	10.680	29996	14	2.997	13.932	30068	10	9.746	15.986	30140	10	11.660	18.070
29853	14	14.063	7.062	29925	18	13.510	10.580	29997	17	3.634	13.164	30069	10	11.768	15.276	30141	8	12.182	18.143
29854	13	14.254	7.204	29926	10	13.593	10.738	29998	12	4.532	13.710	30070	12	12.110	15.625	30142	11	13.954	18.307
29855	8	14.558	7.626	29927	20	14.576	10.108	29999	14	5.189	13.190	30071	12	14.912	15.796	30143	10	14.565	18.888
29856	25	15.185	7.386	29928	11	14.984	10.746	30000	10	5.381	13.318	30072	10	15.179	15.380	30144	24	15.976	18.758
29857	17	16.538	7.157	29929*	27	15.084	10.382	30001	14	5.594	13.632	30073	19	15.472	15.585	30145	20	16.831	18.036
29858	10	18.076	7.979	29930	10	16.750	10.474	30002	13	5.734	13.674	30074	17	16.865	15.100	30146	23	17.914	18.357
29859	23	21.922	7.610	29931	17	17.445	10.744	30003	10	5.811	13.772	30075	19	16.918	15.470	30147	10	21.756	18.832
29860	10	22.001	7.447	29932	8	18.706	10.757	30004	17	5.867	13.423	30076	9	16.954	15.257	30148	11	22.020	18.960
29861	8	23.034	7.232	29933	10	18.711	10.996	30005	12	6.600	13.457	30077	12	17.464	15.999	30149	13	22.250	18.222
29862	15	23.512	7.650	29934	11	19.225	10.030	30006	10	6.901	13.047	30078	16	18.299	15.464	30150	10	24.520	18.262
29863	20	24.400	7.630	29935	8	19.502	10.158	30007	12	9.346	13.720	30079	17	18.478	15.344	30151	11	1.644	19.584
29864	13	25.914	7.074	29936	13	19.925	10.494	30008	9	9.906	13.428	30080*	26	20.872	15.050	30152	10	1.790	19.994
29865	8	3.676	8.501	29937	8	19.947	10.860	30009	8	10.063	13.357	30081	15	21.170	15.725	30153	10	2.008	19.440
29866	11	4.346	8.076	29938	12	23.929	10.464	30010	23	10.522	13.122	30082	10	21.550	15.300	30154	11	3.160	19.555
29867	8	4.418	8.188	29939	10	24.290	10.010	30011	14	10.647	13.920	30083	9	22.175	15.203	30155	11	4.188	19.125
29868	10	4.878	8.500	29940	14	24.616	10.192	30012	17	11.456	13.192	30084*	29	22.952	15.675	30156	20	4.800	19.037
29869	12	6.540	8.902	29941	14	25.005	10.256	30013	25	11.551	13.220	30085	13	22.966	15.704	30157	16	5.060	19.760
29870	8	6.543	8.540	29942	23	1.050	11.780	30014	10	11.930	13.520	30086	11	23.191	15.546	30158	14	6.346	19.576
29871	15	7.120	8.759	29943	12	2.670	11.643	30015	11	11.982	13.452	30087*	34	24.257	15.238	30159	12	7.355	19.151
29872	10	9.740	8.194	29944	14	2.820	11.788	30016*	37	12.830	13.576	30088	22	0.916	16.606	30160	13	8.298	19.758
29873	9	9.852	8.606	29945	10	3.972	11.279	30017	11	14.470	13.598	30089	19	1.417	16.714	30161	10	8.441	19.917
29874	10	10.524	8.882	29946	13	4.636	11.198	30018*	47	15.180	13.648	30090	14	1.947	16.952	30162*	31	9.170	19.912
29875	13	10.950	8.926	29947	12	5.598	11.079	30019	11	16.642	13.296	30091	9	2.650	16.039	30163	8	9.520	19.450
29876	24	14.264	8.518	29948	14	6.528	11.882	30020	11	16.846	13.710	30092	15	3.043	16.868	30164	24	10.742	19.396
29877	10	16.390	8.213	29949	10	7.846	11.188</												



30175*	39	15°980	19°925	30247	10	4°346	22°157	30319	10	7°732	25°324	30383	9	11°221	3°270	30455	23	18°228	8°298
30176	12	16°204	19°970	30248	29	4°426	22°960	30320	20	9°087	25°872	30384	25	14°305	3°102	30456	10	21°581	8°990
30177	9	16°644	19°152	30249	20	4°484	22°418	30321	12	9°417	25°722	30385	15	15°422	3°182	30457	30	0°861	9°898
30178	11	16°744	19°637	30250	10	4°872	22°682	30322*	46	9°784	25°124	30386	17	16°106	3°470	30458*	40	1°570	9°294
30179	15	17°288	19°974	30251	8	5°709	22°444	30323	18	9°896	25°956	30387	8	18°886	3°453	30459	8	6°302	9°476
30180	9	18°218	19°437	30252	11	7°260	22°513	30324	14	11°787	25°360	30388	8	19°452	3°992	30460	31	11°782	9°041
30181	13	18°462	19°544	30253	10	7°318	22°086	30325	20	13°120	25°338	30389	28	20°906	3°354	30461	12	16°030	9°451
30182	10	18°880	19°958	30254	15	9°200	22°000	30326	10	14°661	25°618	30390*	55	23°190	3°571	30462	10	20°524	9°328
30183	8	20°778	19°486	30255	19	10°272	22°600	30327	14	15°378	25°242	30391	13	24°191	3°303	30463	20	21°916	9°914
30184	10	20°787	19°776	30256	10	10°334	22°559	30328	9	15°851	25°337	30392	29	25°496	3°896	30464	12	25°064	9°629
30185	9	22°453	19°460	30257	10	11°110	22°061	30329	13	15°919	25°824	30393	18	0°336	4°240	30465	10	1°854	10°524
30186	16	22°533	19°464	30258	10	12°212	22°296	30330	10	15°942	25°470	30394	23	3°022	4°574	30466	8	2°208	10°068
30187	11	24°526	19°920	30259	8	12°400	22°204	30331	11	16°343	25°554	30395	18	8°444	4°353	30467	13	2°534	10°246
30188	13	1°610	20°334	30260	11	12°477	22°756	30332	19	18°526	25°118	30396	17	8°574	4°394	30468	13	2°927	10°306
30189	17	1°664	20°098	30261	10	15°688	22°787	30333	14	24°592	25°148	30397*	40	10°161	4°814	30469	8	6°164	10°459
30190	8	1°728	20°812	30262	8	15°900	22°539	30334	10	25°102	25°651	30398	32	10°161	4°154	30470*	44	6°580	10°074
30191*	37	2°174	20°556	30263	10	17°090	22°307					30399	10	15°864	4°880	30471	16	8°847	10°801
30192	10	3°546	20°334	30264*	26	21°348	22°937					30400	15	24°190	4°868	30472	8	10°785	10°717
30193	14	5°350	20°383	30265	14	21°637	22°657					30401	10	25°138	4°660	30473	12	12°466	10°994
30194	10	7°085	20°382	30266	8	25°550	22°548					30402	8	0°294	5°986	30474	24	14°806	10°306
30195	15	7°490	20°230	30267	26	0°128	23°350					30403	18	7°232	5°254	30475	9	15°694	10°948
30196	24	9°172	20°166	30268	11	0°467	23°078					30404*	61	7°914	5°395	30476*	44	16°395	10°864
30197	14	9°948	20°786	30269	13	1°094	23°348					30405	24	9°870	5°990	30477*	41	16°656	10°642
30198	19	10°534	20°472	30270	11	1°664	23°793					30406	34	13°989	5°412	30478	11	18°324	10°939
30199	9	11°192	20°553	30271*	47	5°850	23°810					30407	32	17°812	5°744	30479	8	21°520	10°180
30200	20	11°377	20°143	30272	23	5°922	23°220					30408	31	22°070	5°450	30480	10	23°085	10°384
30201	13	11°940	20°963	30273	26	6°288	23°098					30409	9	0°608	6°481	30481	34	0°052	11°127
30202	13	12°935	20°457	30274	8	6°313	23°042					30410	8	2°755	6°944	30482	32	0°064	11°349
30203	9	13°080	20°876	30275	10	7°944	23°494					30411	15	4°605	6°594	30483	12	0°333	11°542
30204	19	13°380	20°984	30276	21	8°015	23°135					30412	22	5°757	6°444	30484	8	0°336	11°356
30205	10	13°832	20°581	30277	17	8°462	23°025					30413	8	5°830	6°830	30485	10	0°512	11°465
30206	11	14°876	20°430	30278	11	8°564	23°208					30414	8	6°341	6°768	30486	35	3°566	11°650
30207	30	15°044	20°714	30279	12	9°200	23°154					30415	16	6°509	6°888	30487	12	5°657	11°346
30208	12	15°767	20°362	30280	15	9°532	23°206					30416	18	7°828	6°470	30488	24	5°960	11°128
30209	14	16°027	20°717	30281	28	9°798	23°698					30417	14	7°833	6°128	30489	8	6°300	11°917
30210	9	20°166	20°406	30282	9	10°110	23°730					30418	35	8°884	6°198	30490	10	6°535	11°140
30211*	38	20°758	20°928	30283	20	10°870	23°321					30419*	41	9°401	6°192	30491	34	8°086	11°402
30212	14	24°154	20°875	30284	16	11°713	23°477					30420	11	14°552	6°241	30492	19	8°286	11°890
30213	24	0°428	21°180	30285	19	12°240	23°926					30421	14	14°685	6°310	30493	21	9°486	11°120
30214	48	0°435	21°200	30286	11	13°026	23°096					30422*	31	15°600	6°417	30494	10	10°158	11°748
30215	10	1°719	21°718	30287	11	15°252	23°749					30423	12	17°137	6°264	30495	20	12°044	11°736
30216	9	1°865	21°043	30288	18	16°360	23°661					30424	12	17°900	6°594	30496	17	14°498	11°224
30217	11	2°568	21°769	30289	20	16°380	23°675					30425	16	18°150	6°498	30497	32	16°776	11°975
30218	10	2°593	21°735	30290	12	16°624	23°600					30426	21	19°552	6°523	30498	11	17°444	11°844
30219	11	2°904	21°284	30291	12	17°994	23°174					30427	17	20°232	6°447	30499	31	17°451	11°342
30220	16	4°052	21°790	30292	25	18°254	23°628					30428	9	23°691	6°766	30500	8	18°902	11°837
30221	10	4°231	21°874	30293	17	18°646	23°586					30429	13	1°400	7°719	30501	14	19°628	11°826
30222	15	4°710	21°314	30294	17	21°172	23°351					30430	29	1°426	7°016	30502	13	2°041	12°475
30223	16	4°975	21°656	30295*	60	23°376	23°091					30431	23	2°288	7°688	30503	8	3°900	12°066
30224	16	6°453	21°124	30296	12	24°360	23°882					30432	12	3°798	7°114	30504	10	5°980	12°280
30225	26	6°955	21°182	30297	12	0°077	24°720					30433	17	3°886	7°168	30505	30	6°625	12°134
30226	8	8°381	21°490	30298	28	0°676	24°006					30434	15	4°416	7°820	30506	9	6°908	12°666
30227*	26	8°392	21°426	30299	13	2°436	24°209					30435	20	5°772	7°612	30507	8	7°824	12°300
30228	14	8°815	21°173	30300	20	5°398	24°964					30436	12	6°816	7°281	30508	8	8°269	12°884
30229	9	10°200	21°149	30301	10	8°499	24°426					30437	12	8°386	7°160	30509	13	9°627	12°100
30230	14	12°997	21°668	30302	9	10°635	24°244					30438	11	8°416	7°361	30510	9	9°848	12°072
30231	10	14°314	21°790	30303	9	11°610	24°162					30439	14	10°139	7°768	30511	20	12°346	12°696
30232	10	14°910	21°748	30304	9	13°448	24°085					30440	10	10°156	7°776	30512*	37	13°050	12°934
30233	18	14°986	21°772	30305	15	14°806	24°694					30441	26	10°496	7°674	30513	10	15°210	12°114
30234	9	15°052	21°135	30306	11	16°087	24°508					30442	15	11°997	7°211	30514	31	16°580	12°828
30235	10	16°020	21°292	30307	11	16°216	24°940					30443	10	15°115	7°978	30515	9	18°756	12°416
30236	10	16°675	21°156	30308	12	18°520	24°084					30444	34	16°023	7°142	30516	10	22°061	12°852
30237	8	17°175	21°054	30309	12	20°200	24°746					30445	28	0°938	8°116	30517	26	24°464	12°159
30238	10	19°670	21°475	30310	10	21°157	24°936					30446	8	5°275	8°275	30518	10	24°724	12°608
30239	10	21°913	21°842	30311	14	21°465	24°666					30447	12	7°370	8°450	30519	10	25°382	12°018
30240	12	22°838	21°232	30312	12	22°050	24°735					30448	14	10°027	8°274	30520	19	1°746	13°344
30241	16	23°750	21°354	30313	14	23°676	24°756					30449	14	10°115	8°124	30521	12	4°984	13°040
30242	11	25°830	21°580	30314	25	2°077	25°380					30450	32	10°965	8°302	30522	11	5°867	13°005
30243	12	0°054	22°816	30315	10	4°479	25°462												



29815	23	7.190	6.802	29887	8	4.244	9.575	29959	14	13.770	11.937	30031	28	5.500	14.624	30103	20	13.800	16.478
29816	23	8.213	6.733	29888	26	4.450	9.272	29960	15	15.037	11.680	30032	15	6.668	14.471	30104	18	13.853	16.367
29817	8	9.488	6.222	29889	10	6.208	9.411	29961	14	15.820	11.386	30033	8	7.756	14.792	30105	16	15.425	16.451
29818*	45	9.836	6.697	29890	10	7.210	9.256	29962	14	18.293	11.798	30034	14	8.530	14.837	30106	10	16.256	16.300
29819	11	10.206	6.614	29891	10	7.999	9.170	29963	10	19.264	11.146	30035	21	9.110	14.917	30107	10	17.825	16.398
29820	10	10.377	6.112	29892	23	8.000	9.873	29964	14	21.155	11.130	30036	21	9.415	14.654	30108	13	18.670	16.628
29821	10	10.577	6.614	29893	10	10.278	9.386	29965	29	22.124	11.044	30037	11	10.542	14.956	30109	11	21.186	16.618
29822	20	10.952	6.283	29894	23	10.280	9.054	29966	25	22.135	11.265	30038	11	10.661	14.785	30110	10	21.406	16.488
29823	11	11.663	6.510	29895	12	11.610	9.240	29967	15	22.400	11.460	30039	11	12.166	14.845	30111	17	23.205	16.972
29824	16	11.764	6.014	29896	10	13.422	9.026	29968	13	22.404	11.275	30040	12	12.390	14.802	30112*	36	23.796	16.490
29825	10	12.086	6.008	29897	9	13.539	9.086	29969	11	23.579	11.386	30041	12	13.414	14.721	30113	15	2.030	17.664
29826	12	13.492	6.674	29898	8	13.958	9.192	29970	28	25.632	11.606	30042	10	13.562	14.520	30114	8	3.094	17.573
29827	21	14.008	6.982	29899	12	14.716	9.185	29971	20	0.002	12.761	30043	28	14.050	14.815	30115	11	3.420	17.988
29828	11	14.318	6.943	29900	26	14.917	9.658	29972	14	0.416	12.562	30044	11	14.164	14.648	30116	17	7.590	17.443
29829	18	17.115	6.141	29901	13	16.165	9.370	29973	19	2.576	12.932	30045	9	14.700	14.176	30117*	49	7.816	17.048
29830	11	19.427	6.816	29902	10	16.606	9.394	29974	26	3.537	12.982	30046	12	14.715	14.362	30118	28	7.836	17.052
29831	20	19.567	6.440	29903	10	17.040	9.488	29975	15	4.815	12.822	30047	19	16.100	14.006	30119	13	12.554	17.682
29832	13	20.020	6.972	29904	16	19.850	9.890	29976	10	5.050	12.994	30048	11	18.162	14.350	30120	12	12.890	17.385
29833	10	21.320	6.394	29905	12	20.131	9.389	29977	17	5.758	12.861	30049	21	18.946	14.652	30121	20	14.634	17.690
29834	10	21.775	6.592	29906	15	20.278	9.866	29978	10	7.980	12.444	30050	8	19.314	14.888	30122	9	14.765	17.293
29835	13	22.735	6.405	29907	11	20.364	9.614	29979	13	7.987	12.371	30051	11	19.502	14.758	30123	10	15.280	17.802
29836	23	23.543	6.948	29908	11	22.073	9.853	29980	19	8.445	12.454	30052	18	20.074	14.457	30124	13	16.550	17.075
29837	10	1.369	7.676	29909	21	22.946	9.822	29981	12	9.246	12.411	30053	12	21.500	14.812	30125	12	16.793	17.381
29838	23	2.330	7.562	29910*	40	23.666	9.226	29982	12	9.778	12.944	30054	14	23.142	14.370	30126	12	17.194	17.674
29839	20	2.702	7.944	29911	11	2.163	10.657	29983	10	10.165	12.237	30055	23	23.158	14.193	30127	22	18.077	17.550
29840	13	3.134	7.924	29912	11	4.150	10.776	29984	10	11.045	12.043	30056	12	23.580	14.682	30128	12	19.125	17.703
29841	19	3.558	7.574	29913	28	4.187	10.870	29985	26	11.421	12.933	30057	19	23.734	14.959	30129	11	20.643	17.209
29842	12	5.053	7.244	29914	10	4.248	10.740	29986	9	12.324	12.004	30058	10	1.485	15.995	30130	16	20.930	17.314
29843	13	5.397	7.840	29915	11	4.364	10.654	29987	9	13.491	12.230	30059	9	2.325	15.900	30131	13	22.598	17.970
29844	11	5.790	7.344	29916	9	4.747	10.484	29988	18	15.268	12.457	30060	8	3.214	15.306	30132	21	2.464	18.586
29845	10	6.526	7.936	29917	12	4.824	10.460	29989	11	15.304	12.236	30061	14	4.444	15.596	30133	31	3.233	18.174
29846	22	8.548	7.761	29918	10	5.226	10.764	29990	19	20.213	12.980	30062	11	5.363	15.887	30134	24	3.323	18.393
29847	9	8.568	7.117	29919	10	5.680	10.593	29991	10	20.815	12.480	30063	12	5.710	15.233	30135	25	3.633	18.696
29848	14	8.703	7.476	29920	16	6.765	10.843	29992	14	24.094	12.414	30064	12	5.838	15.310	30136	14	7.507	18.888
29849	13	11.186	7.986	29921	21	8.052	10.200	29993	20	0.165	13.430	30065*	26	6.867	15.461	30137	11	7.648	18.884
29850	14	11.242	7.646	29922	10	9.170	10.964	29994	18	1.008	13.250	30066	14	7.036	15.844	30138	14	10.837	18.555
29851	14	11.246	7.338	29923	10	9.290	10.478	29995	14	2.602	13.270	30067	14	9.717	15.940	30139	16	11.602	18.538
29852	19	11.544	7.007	29924*	42	12.862	10.680	29996	14	2.997	13.932	30068	10	9.746	15.986	30140	10	11.660	18.070
29853	14	14.063	7.062	29925	18	13.510	10.580	29997	17	3.634	13.164	30069	10	11.768	15.276	30141	8	12.182	18.143
29854	13	14.254	7.204	29926	10	13.593	10.738	29998	12	4.532	13.710	30070	12	12.110	15.625	30142	11	13.954	18.307
29855	8	14.558	7.626	29927	20	14.576	10.108	29999	14	5.189	13.190	30071	12	14.912	15.796	30143	10	14.565	18.888
29856	25	15.185	7.386	29928	11	14.984	10.746	30000	10	5.381	13.318	30072	10	15.179	15.380	30144	24	15.976	18.758
29857	17	16.538	7.157	29929*	27	15.084	10.382	30001	14	5.594	13.632	30073	19	15.472	15.585	30145	20	16.831	18.036
29858	10	18.076	7.979	29930	10	16.750	10.474	30002	13	5.734	13.674	30074	17	16.865	15.100	30146	23	17.914	18.357
29859	23	21.922	7.610	29931	17	17.445	10.744	30003	10	5.811	13.772	30075	19	16.918	15.470	30147	10	21.756	18.832
29860	10	22.001	7.447	29932	8	18.706	10.757	30004	17	5.867	13.423	30076	9	16.954	15.257	30148	11	22.020	18.960
29861	8	23.034	7.232	29933	10	18.711	10.996	30005	12	6.600	13.457	30077	12	17.464	15.999	30149	13	22.250	18.222
29862	15	23.512	7.650	29934	11	19.225	10.030	30006	10	6.901	13.447	30078	16	18.299	15.464	30150	10	24.520	18.262
29863	20	24.400	7.630	29935	8	19.502	10.158	30007	12	9.346	13.720	30079	17	18.478	15.344	30151	11	1.644	19.584
29864	13	25.914	7.074	29936	13	19.925	10.494	30008	9	9.906	13.428	30080*	26	20.872	15.050	30152	10	1.790	19.994
29865	8	3.676	8.501	29937	8	19.947	10.860	30009	8	10.063	13.357	30081	15	21.170	15.725	30153	10	2.008	19.440
29866	11	4.346	8.076	29938	12	23.929	10.464	30010	23	10.522	13.122	30082	10	21.550	15.300	30154	11	3.160	19.555
29867	8	4.418	8.188	29939	10	24.290	10.010	30011	14	10.647	13.920	30083	9	22.175	15.203	30155	11	4.188	19.125
29868	10	4.878	8.500	29940	14	24.616	10.192	30012	17	11.456	13.192	30084*	29	22.952	15.675	30156	20	4.800	19.037
29869	12	6.540	8.902	29941	14	25.005	10.256	30013	25	11.551	13.220	30085	13	22.966	15.704	30157	16	5.060	19.760
29870	8	6.543	8.540	29942	23	1.050	11.780	30014	10	11.930	13.520	30086	11	23.191	15.546	30158	14	6.346	19.576
29871	15	7.120	8.759	29943	12	2.670	11.643	30015	11	11.982	13.452	30087*	34	24.257	15.238	30159	12	7.355	19.151
29872	10	9.740	8.194	29944	14	2.820	11.788	30016*	37	12.830	13.576	30088	22	0.916	16.606	30160	13	8.298	19.758
29873	9	9.852	8.606	29945	10	3.972	11.279	30017	11	14.470	13.598	30089	19	1.417	16.714	30161	10	8.441	19.917
29874	10	10.524	8.882	29946	13	4.636	11.198	30018*	47	15.180	13.648	30090	14	1.947	16.952	30162*	31	9.170	19.912
29875	13	10.950	8.926	29947	12	5.598	11.079	30019	11	16.642	13.296	30091	9	2.650	16.039	30163	8	9.520	19.450
29876	24	14.264	8.518	29948	14	6.528	11.882	30020	11	16.846	13.710	30092	15	3.043	16.868	30164	24	10.742	19.396
29877	10	16.390	8.213	29949	10	7.846	11.188</												



30175*	39	15°980	19°925	30247	10	4°346	22°157	30319	10	7°732	25°324	30383	9	11°221	3°270	30455	23	18°228	8°298
30176	12	16°204	19°970	30248	29	4°426	22°960	30320	20	9°087	25°872	30384	25	14°305	3°102	30456	10	21°581	8°990
30177	9	16°644	19°152	30249	20	4°484	22°418	30321	12	9°417	25°722	30385	15	15°422	3°182	30457	30	0°861	9°898
30178	11	16°744	19°637	30250	10	4°872	22°682	30322*	46	9°784	25°124	30386	17	16°106	3°470	30458*	40	1°570	9°294
30179	15	17°288	19°974	30251	8	5°709	22°444	30323	18	9°896	25°956	30387	8	18°886	3°453	30459	8	6°302	9°476
30180	9	18°218	19°437	30252	11	7°260	22°513	30324	14	11°787	25°360	30388	8	19°452	3°992	30460	31	11°782	9°041
30181	13	18°462	19°544	30253	10	7°318	22°086	30325	20	13°120	25°338	30389	28	20°906	3°354	30461	12	16°030	9°451
30182	10	18°880	19°958	30254	15	9°200	22°000	30326	10	14°661	25°618	30390*	55	23°190	3°571	30462	10	20°524	9°328
30183	8	20°778	19°486	30255	19	10°272	22°600	30327	14	15°378	25°242	30391	13	24°191	3°303	30463	20	21°916	9°914
30184	10	20°787	19°776	30256	10	10°334	22°559	30328	9	15°851	25°337	30392	29	25°496	3°896	30464	12	25°064	9°629
30185	9	22°453	19°460	30257	10	11°110	22°061	30329	13	15°919	25°824	30393	18	0°336	4°240	30465	10	1°854	10°524
30186	16	22°533	19°464	30258	10	12°212	22°296	30330	10	15°942	25°470	30394	23	3°022	4°574	30466	8	2°208	10°068
30187	11	24°526	19°920	30259	8	12°400	22°204	30331	11	16°343	25°554	30395	18	8°444	4°353	30467	13	2°534	10°246
30188	13	1°610	20°334	30260	11	12°477	22°756	30332	19	18°526	25°118	30396	17	8°574	4°394	30468	13	2°927	10°306
30189	17	1°664	20°098	30261	10	15°688	22°787	30333	14	24°592	25°148	30397*	40	10°161	4°814	30469	8	6°164	10°459
30190	8	1°728	20°812	30262	8	15°900	22°539	30334	10	25°102	25°651	30398	32	10°161	4°154	30470*	44	6°580	10°074
30191*	37	2°174	20°556	30263	10	17°090	22°307					30399	10	15°864	4°880	30471	16	8°847	10°801
30192	10	3°546	20°334	30264*	26	21°348	22°937					30400	15	24°190	4°868	30472	8	10°785	10°717
30193	14	5°350	20°383	30265	14	21°637	22°657					30401	10	25°138	4°660	30473	12	12°466	10°994
30194	10	7°085	20°382	30266	8	25°550	22°548					30402	8	0°294	5°986	30474	24	14°806	10°306
30195	15	7°490	20°230	30267	26	0°128	23°350					30403	18	7°232	5°254	30475	9	15°694	10°948
30196	24	9°172	20°166	30268	11	0°467	23°078					30404*	61	7°914	5°395	30476*	44	16°395	10°864
30197	14	9°948	20°786	30269	13	1°094	23°348					30405	24	9°870	5°990	30477*	41	16°656	10°642
30198	19	10°534	20°472	30270	11	1°664	23°793					30406	34	13°989	5°412	30478	11	18°324	10°939
30199	9	11°192	20°553	30271*	47	5°850	23°810					30407	32	17°812	5°744	30479	8	21°520	10°180
30200	20	11°377	20°143	30272	23	5°922	23°220					30408	31	22°070	5°450	30480	10	23°085	10°384
30201	13	11°940	20°963	30273	26	6°288	23°098					30409	9	0°608	6°481	30481	34	0°052	11°127
30202	13	12°935	20°457	30274	8	6°313	23°042					30410	8	2°755	6°944	30482	32	0°064	11°349
30203	9	13°080	20°876	30275	10	7°944	23°494					30411	15	4°605	6°594	30483	12	0°333	11°542
30204	19	13°380	20°984	30276	21	8°015	23°135					30412	22	5°757	6°444	30484	8	0°336	11°356
30205	10	13°832	20°581	30277	17	8°462	23°025					30413	8	5°830	6°830	30485	10	0°512	11°465
30206	11	14°876	20°430	30278	11	8°564	23°208					30414	8	6°341	6°768	30486	35	3°566	11°650
30207	30	15°044	20°714	30279	12	9°200	23°154					30415	16	6°509	6°888	30487	12	5°657	11°346
30208	12	15°767	20°362	30280	15	9°532	23°206					30416	18	7°828	6°470	30488	24	5°960	11°128
30209	14	16°027	20°717	30281	28	9°798	23°698					30417	14	7°833	6°128	30489	8	6°300	11°917
30210	9	20°166	20°406	30282	9	10°110	23°730					30418	35	8°884	6°198	30490	10	6°535	11°140
30211*	38	20°758	20°928	30283	20	10°870	23°321					30419*	41	9°401	6°192	30491	34	8°086	11°402
30212	14	24°154	20°875	30284	16	11°713	23°477					30420	11	14°552	6°241	30492	19	8°286	11°890
30213	24	0°428	21°180	30285	19	12°240	23°926					30421	14	14°685	6°310	30493	21	9°486	11°120
30214	48	0°435	21°200	30286	11	13°026	23°096					30422*	31	15°600	6°417	30494	10	10°158	11°748
30215	10	1°719	21°718	30287	11	15°252	23°749					30423	12	17°137	6°264	30495	20	12°044	11°736
30216	9	1°865	21°043	30288	18	16°360	23°661					30424	12	17°900	6°594	30496	17	14°498	11°224
30217	11	2°568	21°769	30289	20	16°380	23°675					30425	16	18°150	6°498	30497	32	16°776	11°975
30218	10	2°593	21°735	30290	12	16°624	23°600					30426	21	19°552	6°523	30498	11	17°444	11°844
30219	11	2°904	21°284	30291	12	17°994	23°174					30427	17	20°232	6°447	30499	31	17°451	11°342
30220	16	4°052	21°790	30292	25	18°254	23°628					30428	9	23°691	6°766	30500	8	18°902	11°837
30221	10	4°231	21°874	30293	17	18°646	23°586					30429	13	1°400	7°719	30501	14	19°628	11°826
30222	15	4°710	21°314	30294	17	21°172	23°351					30430	29	1°426	7°016	30502	13	2°041	12°475
30223	16	4°975	21°656	30295*	60	23°376	23°091					30431	23	2°288	7°688	30503	8	3°900	12°066
30224	16	6°453	21°124	30296	12	24°360	23°882					30432	12	3°798	7°114	30504	10	5°980	12°280
30225	26	6°955	21°182	30297	12	0°077	24°720					30433	17	3°886	7°168	30505	30	6°625	12°134
30226	8	8°381	21°490	30298	28	0°676	24°006					30434	15	4°416	7°820	30506	9	6°908	12°666
30227*	26	8°392	21°426	30299	13	2°436	24°209					30435	20	5°772	7°612	30507	8	7°824	12°300
30228	14	8°815	21°173	30300	20	5°398	24°964					30436	12	6°816	7°281	30508	8	8°269	12°884
30229	9	10°200	21°149	30301	10	8°499	24°426					30437	12	8°386	7°160	30509	13	9°627	12°100
30230	14	12°997	21°668	30302	9	10°635	24°244					30438	11	8°416	7°361	30510	9	9°848	12°072
30231	10	14°314	21°790	30303	9	11°610	24°162					30439	14	10°139	7°768	30511	20	12°346	12°696
30232	10	14°910	21°748	30304	9	13°448	24°085					30440	10	10°156	7°776	30512*	37	13°050	12°934
30233	18	14°986	21°772	30305	15	14°806	24°694					30441	26	10°496	7°674	30513	10	15°210	12°114
30234	9	15°052	21°135	30306	11	16°087	24°508					30442	15	11°997	7°211	30514	31	16°580	12°828
30235	10	16°020	21°292	30307	11	16°216	24°940					30443	10	15°115	7°978	30515	9	18°756	12°416
30236	10	16°675	21°156	30308	12	18°520	24°084					30444	34	16°023	7°142	30516	10	22°061	12°852
30237	8	17°175	21°054	30309	12	20°200	24°746					30445	28	0°938	8°116	30517	26	24°464	12°159
30238	10	19°670	21°475	30310	10	21°157	24°936					30446	8	5°275	8°275	30518	10	24°724	12°608
30239	10	21°913	21°842	30311	14	21°465	24°666					30447	12	7°370	8°450	30519	10	25°382	12°018
30240	12	22°838	21°232	30312	12	22°050	24°735					30448	14	10°027	8°274	30520	19	1°746	13°344
30241	16	23°750	21°354	30313	14	23°676	24°756					30449	14	10°115	8°124	30521	12	4°984	13°040
30242	11	25°830	21°580	30314	25	2°077	25°380					30450	32	10°965	8°302	30522	11	5°867	13°005
30243	12	0°054	22°816	30315	10	4°													



30527	18	17.990	13.172	30599	8	18.080	17.378	30671	34	22.633	22.451	30756	8	18.814	0.212	30828	9	16.662	8.530
30528	8	18.486	13.194	30600*	37	18.316	17.348	30672	8	23.062	22.926	30757	29	21.876	0.882	30829	8	17.507	8.478
30529	8	20.741	13.224	30601	28	20.130	17.540	30673	10	24.584	22.086	30758	10	22.195	0.800	30830	13	21.872	8.974
30530	24	23.234	13.731	30602	8	20.600	17.195	30674*	54	1.445	23.157	30759	43	24.478	0.216	30831	13	21.888	8.855
30531	10	24.684	13.268	30603	8	21.039	17.256	30675	10	2.446	23.940	30760	8	4.680	1.073	30832	8	24.637	8.612
30532	16	25.485	13.177	30604	27	22.110	17.086	30676	10	8.363	23.688	30761	11	4.712	1.244	30833	21	25.231	8.606
30533	14	1.109	14.441	30605	13	22.177	17.418	30677*	47	9.262	23.705	30762	14	7.867	1.550	30834	8	25.763	8.887
30534	31	1.123	14.265	30606	23	24.642	17.230	30678	30	16.356	23.960	30763	12	9.308	1.025	30835	9	2.240	9.856
30535	10	1.555	14.749	30607	14	0.265	18.304	30679	11	18.182	23.180	30764	12	11.885	1.318	30836	11	2.940	9.856
30536	15	4.148	14.392	30608	10	0.608	18.048	30680	10	20.746	23.952	30765	10	14.244	1.552	30837	9	4.245	9.428
30537	29	4.154	14.774	30609	10	2.538	18.318	30681	30	20.836	23.212	30766	9	17.964	1.316	30838	8	7.758	9.842
30538	9	6.516	14.786	30610	14	6.100	18.290	30682	14	25.002	23.826	30767	12	18.226	1.580	30839	9	8.092	9.760
30539	9	11.202	14.108	30611	17	6.314	18.143	30683	9	0.148	24.822	30768	8	19.204	1.021	30840	17	11.820	9.706
30540	10	12.954	14.212	30612*	33	7.164	18.150	30684	11	1.774	24.824	30769	8	2.652	2.600	30841	14	12.180	9.536
30541	9	14.978	14.090	30613	22	7.295	18.234	30685	23	5.260	24.627	30770	12	3.718	2.391	30842	10	12.184	9.549
30542	9	15.110	14.338	30614	23	10.593	18.887	30686*	51	6.964	24.962	30771	15	15.345	2.153	30843	8	13.256	9.358
30543	22	15.384	14.098	30615	10	10.924	18.742	30687	8	8.874	24.814	30772	20	16.324	2.320	30844	10	13.874	9.495
30544	23	16.384	14.888	30616	31	11.463	18.994	30688	10	9.161	24.574	30773	20	17.738	2.765	30845*	40	15.881	9.607
30545	21	16.748	14.436	30617	12	12.336	18.572	30689	9	11.186	24.494	30774	10	19.924	2.472	30846	24	16.384	9.495
30546	20	17.157	14.690	30618	15	12.542	18.632	30690	30	11.412	24.863	30775*	61	0.941	3.836	30847	22	17.324	9.816
30547	8	17.232	14.691	30619	8	14.392	18.896	30691	8	13.509	24.576	30776	10	1.492	3.189	30848	10	18.946	9.896
30548	22	17.734	14.590	30620	34	19.924	18.316	30692	30	14.663	24.758	30777	14	1.945	3.548	30849	8	24.426	9.094
30549	23	18.772	14.496	30621	10	0.044	19.046	30693	8	17.042	24.074	30778	11	3.884	3.675	30850	10	0.976	10.648
30550	10	19.673	14.470	30622	15	0.564	19.544	30694	10	18.964	24.560	30779	10	6.060	3.325	30851	10	6.015	10.070
30551	10	20.706	14.915	30623	8	2.112	19.912	30695	12	19.548	24.042	30780	10	7.902	3.106	30852	8	6.025	10.355
30552	10	21.086	14.794	30624	10	2.563	19.976	30696	17	20.189	24.014	30781	12	19.686	3.248	30853	10	7.726	10.051
30553	14	21.696	14.720	30625	9	6.294	19.360	30697	14	21.980	24.044	30782	10	24.160	3.791	30854	15	10.661	10.730
30554	22	22.398	14.816	30626	14	6.755	19.312	30698	34	22.016	24.815	30783	12	2.920	4.885	30855	9	10.900	10.230
30555*	38	23.599	14.160	30627	16	7.278	19.036	30699	11	22.355	24.677	30784	26	3.260	4.114	30856	10	11.490	10.951
30556	8	23.600	14.701	30628*	31	8.050	19.020	30700	11	2.214	25.700	30785	14	6.675	4.658	30857	11	12.083	10.750
30557	12	23.732	14.310	30629	8	8.133	19.098	30701	13	2.696	25.204	30786	8	12.639	4.882	30858*	70	21.538	10.312
30558	8	24.510	14.396	30630	8	8.482	19.034	30702	14	4.694	25.298	30787	10	15.008	4.098	30859	15	21.884	10.636
30559*	36	0.935	15.750	30631	9	9.852	19.911	30703	17	5.538	25.836	30788	10	21.310	4.026	30860	11	22.616	10.122
30560	11	0.952	15.780	30632	10	9.988	19.080	30704	10	5.978	25.106	30789	15	21.400	4.738	30861	9	24.175	10.428
30561	10	1.174	15.618	30633	16	12.612	19.993	30705	15	8.136	25.416	30790	12	24.474	4.831	30862	8	24.918	10.492
30562	17	1.711	15.025	30634	12	15.389	19.979	30706	24	12.747	25.171	30791	13	1.975	5.113	30863	8	3.775	11.228
30563*	37	2.232	15.299	30635	12	15.800	19.870	30707	31	15.044	25.379	30792	8	5.204	5.311	30864	9	4.788	11.998
30564*	30	4.908	15.058	30636	12	17.176	19.124	30708	9	15.684	25.011	30793	10	6.720	5.955	30865	8	6.769	11.658
30565	9	4.970	15.219	30637	9	18.750	19.346	30709	10	17.564	25.520	30794*	53	8.530	5.958	30866*	26	8.546	11.526
30566	15	5.735	15.266	30638	20	23.651	19.234	30710	13	17.870	25.371	30795	10	10.788	5.869	30867	16	9.164	11.894
30567	8	5.745	15.630	30639	14	2.206	20.937	30711	55	20.700	25.856	30796	20	12.910	5.164	30868	12	11.736	11.260
30568	12	6.162	15.690	30640	11	5.025	20.004	30712	32	22.376	25.862	30797	8	16.470	5.780	30869	10	12.329	11.024
30569	30	8.965	15.544	30641	25	6.296	20.765	30713	48	23.782	25.001	30798	9	21.830	5.416	30870	9	15.194	11.481
30570	11	9.000	15.890	30642	12	10.082	20.500					30799	8	22.388	5.232	30871	10	15.355	11.974
30571	11	13.264	15.915	30643	8	12.720	20.030					30800	12	22.526	5.421	30872	10	16.396	11.535
30572	20	14.748	15.496	30644	10	12.846	20.810					30801	8	22.573	5.512	30873	20	16.803	11.946
30573	16	14.916	15.882	30645	14	16.254	20.284					30802	8	23.706	5.422	30874	12	18.809	11.286
30574	8	17.387	15.450	30646	8	17.626	20.611					30803	8	4.436	6.882	30875*	32	23.750	11.245
30575	9	19.048	15.468	30647	31	19.200	20.636					30804*	40	6.690	6.596	30876	20	24.240	11.354
30576	26	19.250	15.381	30648	8	19.504	20.573					30805	10	11.556	6.624	30877	53	25.680	11.845
30577	10	20.680	15.308	30649	9	19.512	20.997					30806	11	11.654	6.590	30878	8	2.016	12.914
30578	11	21.491	15.964	30650	22	20.228	20.620					30807	13	13.704	6.363	30879	20	2.390	12.397
30579	8	23.767	15.234	30651	11	23.982	20.309					30808*	62	16.451	6.686	30880	10	2.660	12.840
30580	21	24.166	15.690	30652	16	1.804	21.418					30809	14	17.987	6.400	30881	11	3.306	12.238
30581*	38	1.786	16.554	30653	17	3.888	21.621					30810	13	18.207	6.410	30882	10	7.062	12.686
30582*	37	3.989	16.027	30654	10	4.084	21.117					30811	10	19.024	6.623	30883	9	8.848	12.150
30583	21	4.344	16.778	30655	13	9.320	21.668					30812	9	19.580	6.381	30884	14	11.876	12.308
30584	8	8.414	16.300	30656	19	9.345	21.522					30813	9	21.665	6.474	30885	10	13.746	12.290
30585	12	8.846	16.168	30657	33	10.888	21.966					30814	8	1.512	7.019	30886	12	16.326	12.084
30586	11	12.264	16.026	30658	8	13.054	21.084					30815	11	4.894	7.620	30887	11	16.982	12.100
30587	10	13.352	16.122	30659	20	16.945	21.802					30816	11	10.292	7.310	30888	10	19.782	12.617
30588	27	15.472	16.784	30660	28	17.470	21.880					30817	11	12.908	7.895	30889	15	20.524	12.489
30589	11	15.990	16.320	30661	28	22.889	21.010					30818	8	13.976	7.136	30890	12	22.302	12.982
30590	19	16.824	16.974	30662	8	3.622	22.593					30819	10	14.191	7.174	30891	9	24.142	12.602
30591	25	23.216	16.167	30663*	43	4.214	22.360					30820	12	20.407	7.720	30892	12	25.620	12.074
30592																			



30900	8	6.850	13.680	30972	12	22.838	17.444	31044	18	7.110	22.219	R.A. 9 <sup>h</sup> 0 <sup>m</sup>  Plate 961; 1917 Jan. 22.  Provisional Constants.  A      B      C -0.02564 +.00477 +.1046  D      E      F -.00489 -.02571 -.3124  Mag.=16.3-1.09√d	31156	16	5.478	7.746
30901	11	7.512	13.204	30973	12	24.460	17.236	31045	8	8.162	22.851		31157	14	11.283	7.316
30902	24	9.015	13.856	30974	9	1.410	18.846	31046	10	10.605	22.056		31158	11	19.468	7.412
30903*	24	12.798	13.934	30975	8	4.544	18.849	31047	26	17.868	22.014		31159	10	23.920	7.574
30904*	29	13.535	13.620	30976	10	7.762	18.773	31048	8	22.797	22.878		31160	40	25.236	7.908
30905	8	18.423	13.350	30977	12	12.952	18.218	31049*	42	24.226	22.085		31161	41	2.942	8.554
30906	8	19.090	13.246	30978	24	21.151	18.036	31050	8	1.201	23.185		31162	9	3.476	8.834
30907	10	20.528	13.060	30979	10	24.851	18.755	31051	18	5.906	23.830		31163	8	4.156	8.591
30908	8	22.526	13.250	30980	8	1.665	19.718	31052	16	6.451	23.868		31164	10	4.317	8.172
30909*	25	1.560	14.416	30981	14	1.716	19.485	31053	8	8.130	23.050		31165	9	9.534	8.436
30910	8	1.578	14.955	30982	8	3.408	19.904	31054	9	8.549	23.594	31166	27	10.318	8.648	
30911	9	1.699	14.562	30983	9	7.498	19.565	31055	10	8.878	23.142	31167	14	11.374	8.176	
30912	8	2.480	14.632	30984	12	8.033	19.632	31056	8	9.404	23.957	31168	18	12.726	8.712	
30913	9	4.254	14.380	30985	10	8.375	19.967	31057	10	9.543	23.116	31169	24	17.180	8.832	
30914	9	7.860	14.080	30986*	22	8.717	19.922	31058	10	10.070	23.462	31170	13	18.186	8.530	
30915	9	8.156	14.167	30987	11	9.301	19.834	31059	20	11.278	23.005	31171	11	20.294	8.807	
30916	11	10.206	14.720	30988	8	9.548	19.060	31060	8	14.120	23.362	31172	39	22.356	8.560	
30917	12	10.948	14.866	30989	9	10.049	19.738	31061	10	17.008	23.060	31173	17	24.866	8.300	
30918	14	11.512	14.686	30990	9	10.119	19.272	31062	9	17.660	23.313	31174	8	2.139	9.046	
30919	9	14.920	14.774	30991	9	11.970	19.893	31063*	25	19.386	23.947	31175	8	2.406	9.088	
30920	13	15.528	14.902	30992	11	13.712	19.809	31064	12	21.244	23.900	31176	28	4.376	9.738	
30921	11	19.352	14.561	30993	11	14.366	19.762	31065	9	21.445	23.151	31177	10	6.266	9.211	
30922	8	19.947	14.454	30994	10	14.790	19.780	31066	12	22.858	23.702	31178	9	10.859	9.698	
30923	15	22.214	14.245	30995	8	14.848	19.999	31067	22	23.052	23.442	31179	25	11.366	9.456	
30924	8	23.444	14.921	30996	9	16.672	19.636	31068	10	0.140	24.328	31180	31	12.366	9.254	
30925	20	23.875	14.428	30997	20	16.880	19.020	31069	9	0.533	24.950	31181	25	18.555	9.394	
30926	8	24.854	14.165	30998	10	16.982	19.249	31070	18	3.158	24.048	31182	8	19.445	9.736	
30927	15	0.374	15.092	30999	13	18.750	19.006	31071	11	5.379	24.843	31183	8	21.187	9.421	
30928	8	1.756	15.485	31000	12	19.635	19.094	31072	9	5.910	24.588	31184	9	21.372	9.733	
30929	19	2.162	15.934	31001	10	20.375	19.250	31073*	53	6.064	24.936	31185	28	22.474	9.116	
30930	10	4.664	15.948	31002	8	20.963	19.484	31074	11	10.186	24.950	31186	15	23.256	9.228	
30931	8	5.061	15.332	31003	15	21.923	19.424	31075	9	11.802	24.472	31187	8	0.334	10.080	
30932	12	5.602	15.355	31004	8	22.358	19.980	31076	13	13.484	24.042	31188	8	3.945	10.485	
30933	14	7.272	15.945	31005	10	22.742	19.238	31077	40	13.936	24.364	31189	10	7.145	10.738	
30934	8	7.293	15.320	31006	20	25.299	19.368	31078	12	14.488	24.808	31190	9	7.226	10.010	
30935	8	7.368	15.330	31007	11	2.069	20.554	31079	22	14.818	24.034	31191	9	7.446	10.044	
30936	15	8.784	15.106	31008*	20	5.727	20.610	31080	9	14.938	24.520	31192	19	9.857	10.177	
30937*	27	13.092	15.406	31009*	21	6.355	20.407	31081	20	16.110	24.844	31193	28	16.386	10.306	
30938	23	14.034	15.752	31010	8	6.382	20.184	31082	13	20.162	24.140	31194	31	16.759	10.179	
30939	21	14.924	15.484	31011	8	9.470	20.872	31083	11	24.331	24.658	31195	33	17.084	10.030	
30940	20	15.444	15.535	31012	8	10.546	20.830	31084	28	0.194	25.098	31196	8	17.911	10.530	
30941*	32	15.690	15.802	31013	13	10.778	20.986	31085	15	6.989	25.795	31197*	41	18.034	10.914	
30942*	21	16.282	15.514	31014	14	12.214	20.346	31086	12	7.265	25.699	31198	36	18.836	10.214	
30943	8	17.232	15.250	31015	9	12.476	20.518	31087	10	9.240	25.374	31199	8	19.714	10.750	
30944	10	22.064	15.458	31016	10	14.190	20.410	31088	42	10.396	25.344	31200	10	22.624	10.476	
30945	8	22.378	15.736	31017	8	17.392	20.400	31089	12	13.458	25.670	31201	8	25.322	10.199	
30946	8	22.621	15.621	31018	8	17.830	20.463	31090	10	17.004	25.960	31202	8	25.606	10.126	
30947	18	1.220	16.427	31019	13	19.153	20.757	31091	9	17.037	25.924	31203*	41	1.468	11.198	
30948	9	6.585	16.874	31020	9	21.422	20.858	31092	27	18.670	25.727	31204	28	1.960	11.305	
30949	9	11.497	16.956	31021	11	21.544	20.240	31093	12	18.908	25.223	31205*	49	3.399	11.792	
30950	12	17.866	16.763	31022	8	22.676	20.338	31094*	44	19.859	25.130	31206*	44	13.906	11.407	
30951	8	18.804	16.464	31023	10	22.688	20.914	31095	8	22.686	25.645	31207*	41	17.035	11.500	
30952	10	19.512	16.454	31024	12	24.624	20.955					31208	12	18.642	11.594	
30953	10	20.624	16.118	31025	14	0.990	21.276					31209	9	21.625	11.916	
30954	13	23.386	16.355	31026	10	2.375	21.755					31210	17	22.570	11.798	
30955	14	0.134	17.367	31027	8	7.176	21.202					31211	8	22.860	11.202	
30956	8	0.209	17.698	31028	11	7.750	21.174					31212	24	25.654	11.614	
30957	15	2.668	17.462	31029*	22	8.524	21.688					31213	9	0.028	12.940	
30958	10	4.056	17.170	31030	8	9.696	21.450					31214	14	3.344	12.023	
30959	9	4.342	17.638	31031	12	10.353	21.494					31215	14	4.276	12.982	
30960	11	5.884	17.525	31032	10	10.386	21.870					31216	9	4.524	12.091	
30961	13	7.336	17.268	31033	30	13.800	21.594					31217	8	7.100	12.804	
30962	8	8.864	17.772	31034	33	13.808	21.628</									



31228	9	14.915	13.630	31300*	38	6.816	19.508	R.A. 9 <sup>h</sup> 8 <sup>m</sup> Plate 955 ; 1917 Jan. 20. Provisional Constants. A B C -02568 +.00504 +.1512 D E F -00545 -02590 -2826 Mag.=16.3-1.09√d	31456	17	13.489	5.003	31528	10	9.843	10.824
31229	8	16.184	13.763	31301	14	13.320	19.536		31457*	46	14.035	5.194	31529	10	10.893	10.008
31230	9	18.694	13.467	31302	14	13.326	19.016		31458	18	18.002	5.260	31530	13	13.400	10.477
31231	12	19.695	13.664	31303	14	13.496	19.375		31459	10	18.050	5.110	31531	8	17.484	10.880
31232	10	19.836	13.840	31304	14	14.509	19.860		31460	18	19.904	5.090	31532	21	17.954	10.986
31233	29	21.014	13.254	31305	9	19.144	19.466		31461	14	21.874	5.424	31533	10	18.284	10.794
31234	9	21.141	13.004	31306	42	24.724	19.580		31462	9	0.530	6.672	31534	13	19.246	10.600
31235	24	22.832	13.126	31307	9	0.446	20.874	31463	30	2.626	6.056	31535	14	23.474	10.522	
31236	25	25.082	13.984	31308	23	2.384	20.906	31464	25	4.716	6.004	31536	18	24.326	10.401	
31237	37	1.605	14.380	31309	19	7.616	20.816	31465	11	5.486	6.283	31537	14	0.490	11.942	
31238	8	2.585	14.116	31310*	48	12.816	20.135	31466	13	9.700	6.952	31538	20	3.574	11.724	
31239	40	3.996	14.650	31311	13	14.126	20.318	31467	16	9.964	6.252	31539	10	6.598	11.520	
31240	9	9.794	14.683	31312	39	15.276	20.481	31468	10	10.592	6.352	31540	26	6.601	11.558	
31241	9	10.176	14.653	31313*	43	17.304	20.565	31469	16	11.216	6.900	31541	10	7.432	11.266	
31242	8	10.963	14.802	31314	11	17.354	20.390	31470	10	15.960	6.946	31542	22	7.622	11.362	
31243	10	11.554	14.840	31315	30	17.524	20.814	31471	10	17.980	6.733	31543	8	7.800	11.862	
31244	16	13.178	14.374	31316	8	17.588	20.426	31472	9	20.762	6.373	31544	10	8.128	11.021	
31245	9	15.650	14.986	31317	17	24.179	20.344	31473	12	21.238	6.693	31545	12	8.425	11.442	
31246	10	18.028	14.998	31318	42	25.309	20.434	31474	12	22.006	6.994	31546	10	9.234	11.879	
31247	16	22.584	14.370	31319	8	4.022	21.170	31475	10	23.283	6.944	31547	10	13.090	11.066	
31248	12	1.950	15.168	31320	24	6.274	21.058	31476	10	23.370	6.766	31548*	38	13.702	11.638	
31249	13	4.185	15.104	31321	10	6.823	21.426	31477	8	5.420	7.682	31549	10	14.694	11.722	
31250	14	6.205	15.731	31322	8	8.096	21.474	31478	9	6.268	7.250	31550	10	15.762	11.486	
31251	11	8.654	15.845	31323	9	8.574	21.298	31479	9	6.430	7.444	31551	11	19.844	11.306	
31252	17	10.514	15.168	31324	15	9.694	21.936	31480	10	10.674	7.893	31552	17	20.500	11.034	
31253	12	10.790	15.810	31325	9	11.644	21.626	31481	10	12.940	7.158	31553	8	21.753	11.822	
31254	12	10.861	15.471	31326	18	13.200	21.262	31482	28	16.042	7.420	31554	10	21.844	11.628	
31255	10	12.282	15.685	31327*	43	1.984	22.039	31483	26	19.165	7.493	31555	14	22.640	11.168	
31256	27	13.704	15.036	31328	10	3.622	22.716	31484	9	20.670	7.218	31556*	38	23.127	11.360	
31257	10	15.782	15.504	31329	32	10.626	22.384	31485	11	20.766	7.746	31557	10	24.854	11.935	
31258	13	20.564	15.016	31330	17	13.314	22.216	31486	11	23.427	7.477	31558	13	25.430	11.166	
31259	13	20.588	15.498	31331	17	13.898	22.786	31487	23	0.240	8.712	31559*	45	3.286	12.586	
31260	24	1.126	16.310	31332	9	14.296	22.510	31488	9	1.695	8.432	31560	15	6.058	12.494	
31261*	39	3.894	16.068	31333	19	15.938	22.446	31489	19	2.748	8.418	31561	11	7.042	12.660	
31262	13	6.244	16.426	31334	13	20.464	22.656	31490	28	3.114	8.024	31562	19	9.430	12.700	
31263	11	8.681	16.738	31335	10	21.628	22.594	31491	12	4.490	8.414	31563	10	16.893	12.692	
31264	14	8.698	16.790	31336	39	23.092	22.380	31492*	51	4.916	8.118	31564	26	19.181	12.576	
31265	11	13.158	16.216	31337	10	23.175	22.720	31493	10	8.860	8.114	31565	17	20.879	12.280	
31266	12	13.346	16.508	31338	32	23.336	22.844	31494	9	14.090	8.760	31566*	64	23.456	12.784	
31267	8	15.744	16.454	31339	21	0.820	23.398	31495	8	14.159	8.390	31567	20	0.767	13.272	
31268	11	17.268	16.378	31340	10	3.788	23.038	31496	9	14.401	8.940	31568	10	0.850	13.420	
31269	10	19.102	16.867	31341	24	7.469	23.364	31497	20	15.914	8.434	31569*	25	1.750	13.124	
31270*	41	22.474	16.425	31342	17	8.716	23.006	31498	15	19.654	8.086	31570	9	4.238	13.356	
31271	15	0.580	17.401	31343	10	14.163	23.992	31499	11	20.566	8.684	31571	13	4.282	13.076	
31272	12	2.206	17.188	31344*	36	15.026	23.814	31500	29	21.850	8.240	31572	28	5.234	13.902	
31273	9	3.934	17.680	31345	15	17.057	23.285	31501	29	24.865	8.761	31573	19	6.096	13.293	
31274	12	10.054	17.792	31346*	44	20.586	23.321	31502	21	0.366	9.265	31574	19	7.523	13.270	
31275	21	10.534	17.516	31347	10	2.106	24.610	31503	12	1.150	9.368	31575	22	8.247	13.144	
31276	11	10.536	17.144	31348	12	7.454	24.657	31504	28	3.900	9.539	31576*	41	8.518	13.228	
31277*	43	10.743	17.328	31349	13	11.676	24.046	31505	13	5.286	9.160	31577	11	10.090	13.326	
31278	19	12.142	17.274	31350	8	12.930	24.660	31506	12	6.716	9.654	31578	20	12.650	13.631	
31279	8	18.944	17.320	31351	8	14.756	24.168	31507	15	8.470	9.410	31579	9	15.960	13.470	
31280	20	21.834	17.622	31352	31	15.570	24.855	31508	15	8.622	9.758	31580	10	18.603	13.005	
31281	8	24.988	17.084	31353	8	19.360	24.870	31509	12	10.590	9.310	31581	11	18.788	13.315	
31282	23	25.350	17.568	31354	19	22.216	24.874	31510	10	13.330	9.140	31582	18	20.677	13.984	
31283	12	2.600	18.704	31355	11	4.046	25.571	31511	14	14.790	9.828	31583*	37	22.463	13.653	
31284	10	5.356	18.914	31356	47	8.978	25.800	31512	8	16.252	9.398	31584	11	25.334	13.384	
31285	10	5.763	18.466	31357	30	11.523	25.926	31513	8	17.975	9.500	31585	15	0.533	14.516	
31286	12	6.664	18.044	31358	21	12.806	25.216	31514	24	20.978	9.823	31586	21	3.027	14.102	
31287	28	12.068	18.568	31359	12	14.364	25.710	31515	8	21.797	9.226	31587	13	5.114	14.040	
31288	10	13.527	18.024	31360	34	21.052	25.480	31516	23	22.266	9.960	31588	37	5.450	14.870	
31289	15	13.656	18.781					31517	10	22.330	9.524	31589	14	8.165	14.765	



31600	10	0.586	15.496	31672	12	5.328	19.808	31744	10	15.180	24.616	31836	16	5.639	3.923	31908	22	7.400	10.930
31601	8	5.175	15.866	31673	10	7.590	19.504	31745	13	21.678	24.424	31837	17	18.400	3.935	31909	12	7.512	10.817
31602	10	7.801	15.484	31674	8	8.388	19.104	31746	10	22.716	24.729	31838	19	20.227	3.908	31910	13	8.199	10.280
31603	10	8.758	15.788	31675	9	10.088	19.390	31747	10	24.800	24.590	31839	37	21.745	3.515	31911	17	11.434	10.212
31604	10	11.224	15.670	31676*	25	10.265	19.981	31748	29	25.570	24.114	31840	15	25.926	3.090	31912	13	13.574	10.000
31605	8	12.486	15.186	31677	8	13.757	19.452	31749	18	0.298	25.023	31841	19	1.725	4.155	31913	17	16.662	10.496
31606	12	12.596	15.160	31678	11	14.540	19.814	31750	13	2.542	25.539	31842	12	14.323	4.048	31914	12	22.571	10.449
31607	9	15.510	15.615	31679	16	15.953	19.530	31751	10	2.939	25.702	31843	14	18.586	4.236	31915	12	23.492	10.858
31608	11	18.794	15.172	31680	23	16.600	19.869	31752	15	5.830	25.728	31844	14	25.927	4.222	31916	16	23.978	10.180
31609	10	19.192	15.505	31681*	40	18.041	19.170	31753	12	9.874	25.054	31845	36	3.863	5.617	31917	16	0.428	11.378
31610	10	20.423	15.600	31682	10	20.527	19.135	31754	12	9.934	25.565	31846	14	6.236	5.223	31918*	37	0.914	11.570
31611	19	21.020	15.335	31683	9	23.068	19.484	31755	31	15.824	25.354	31847	16	7.726	5.474	31919	13	2.310	11.034
31612	13	21.556	15.800	31684*	24	23.197	19.858	31756	44	16.245	25.070	31848	13	9.121	5.603	31920	16	3.222	11.356
31613	13	22.127	15.006	31685	19	2.201	20.470					31849	13	10.680	5.216	31921	15	5.562	11.663
31614	42	0.444	16.571	31686*	38	3.328	20.550					31850	13	11.848	5.805	31922	19	7.402	11.750
31615	9	1.767	16.431	31687*	19	6.576	20.410					31851	20	12.774	5.681	31923	28	8.009	11.488
31616*	45	5.406	16.298	31688	11	10.263	20.744					31852	17	14.694	5.248	31924	16	9.090	11.401
31617	10	8.560	16.236	31689	9	10.495	20.115					31853	15	22.858	5.824	31925	13	10.127	11.104
31618	16	9.536	16.730	31690	10	11.246	20.244					31854	11	24.228	5.363	31926	14	10.419	11.458
31619*	74	11.242	16.298	31691	21	13.314	20.130					31855	14	24.512	5.737	31927	14	18.392	11.118
31620	13	11.715	16.381	31692	14	14.020	20.393					31856	17	1.126	6.971	31928	14	19.115	11.654
31621	10	14.760	16.396	31693	23	15.763	20.612					31857	12	2.767	6.308	31929	19	19.135	11.766
31622	10	15.584	16.794	31694	10	15.861	20.710					31858	17	4.218	6.824	31930*	28	21.776	11.266
31623*	38	15.869	16.256	31695	8	17.036	20.912					31859	13	7.248	6.140	31931*	78	1.248	12.992
31624	10	15.937	16.458	31696	11	17.650	20.002					31860	24	9.572	6.965	31932	14	2.650	12.129
31625	25	17.026	16.900	31697	10	18.130	20.505					31861	31	10.757	6.694	31933	18	4.030	12.174
31626	12	19.125	16.424	31698*	78	19.666	20.555					31862	18	10.783	6.883	31934	15	5.824	12.154
31627	28	19.729	16.938	31699*	46	21.254	20.606					31863*	36	11.840	6.874	31935	14	7.347	12.214
31628*	28	20.310	16.717	31700	10	24.016	20.022					31864	19	13.900	6.918	31936	16	11.810	12.424
31629	9	20.320	16.685	31701*	21	24.754	20.906					31865	15	14.414	6.594	31937	10	12.649	12.922
31630	9	20.624	16.282	31702	11	10.930	21.280					31866*	36	15.083	6.823	31938	13	13.156	12.706
31631	9	23.106	16.930	31703	11	11.164	21.279					31867	20	15.152	6.081	31939	18	14.628	12.727
31632	10	23.820	16.562	31704	11	11.500	21.846					31868	15	17.286	6.368	31940	14	18.809	12.905
31633	9	24.078	16.995	31705	10	15.470	21.134					31869	11	18.435	6.680	31941	15	19.247	12.598
31634	13	1.974	17.214	31706	16	15.990	21.043					31870	16	25.456	6.310	31942*	38	20.180	12.438
31635	24	3.338	17.684	31707*	60	16.278	21.860					31871	17	1.185	7.684	31943	13	23.200	12.113
31636	28	4.044	17.575	31708	8	16.454	21.807					31872	19	4.186	7.246	31944	16	23.952	12.773
31637	16	4.218	17.286	31709	26	17.412	21.646					31873	24	7.509	7.316	31945	36	0.266	13.866
31638	13	4.821	17.072	31710	31	1.136	22.519					31874	14	12.186	7.278	31946	16	3.140	13.574
31639	11	7.512	17.814	31711	10	1.224	22.856					31875	19	16.460	7.014	31947	13	3.312	13.450
31640	21	7.825	17.440	31712	23	1.388	22.978					31876	29	16.562	7.008	31948	22	5.385	13.556
31641	10	8.070	17.518	31713	14	5.140	22.372					31877	16	17.356	7.341	31949*	34	6.411	13.068
31642	10	10.880	17.053	31714	10	8.335	22.910					31878	14	20.315	7.687	31950	18	8.384	13.812
31643	13	11.778	17.485	31715	18	8.892	22.198					31879	18	22.739	7.332	31951	16	9.466	13.704
31644	18	13.168	17.376	31716	19	9.698	22.789					31880	11	25.476	7.207	31952	13	10.242	13.719
31645	15	13.322	17.800	31717	15	11.532	22.886					31881	34	2.632	8.954	31953*	37	12.080	13.428
31646	14	13.680	17.204	31718	10	13.530	22.444					31882	18	5.672	8.250	31954	20	16.800	13.792
31647	10	14.624	17.881	31719*	42	16.306	22.721					31883	20	14.688	8.610	31955	14	16.942	13.492
31648	18	16.074	17.114	31720	10	17.777	22.350					31884	14	15.960	8.892	31956	16	19.320	13.705
31649	16	17.766	17.016	31721	18	18.394	22.586					31885	18	18.932	8.826	31957	28	20.599	13.706
31650	19	21.236	17.125	31722	10	19.872	22.896					31886	16	19.419	8.752	31958	14	21.408	13.839
31651	13	21.544	17.985	31723	19	20.990	22.341					31887	30	22.088	8.222	31959	16	0.490	14.886
31652	15	0.760	18.244	31724	23	21.030	22.333					31888	17	22.722	8.246	31960*	56	4.568	14.087
31653	8	0.942	18.720	31725	14	24.784	22.988					31889	15	22.896	8.182	31961	12	4.685	14.449
31654	10	4.704	18.196	31726	9	2.036	23.430					31890	14	24.586	8.572	31962	10	5.842	14.342
31655	15	5.948	18.360	31727	10	2.576	23.822					31891	13	0.105	9.739	31963	14	9.552	14.531
31656	11	6.370	18.533	31728	12	4.450	23.016					31892	16	0.170	9.422	31964	18	11.866	14.222
31657*	29	6.539	18.300	31729	10	6.836	23.062					31893	18	9.120	9.739	31965	9	12.128	14.518
31658	13	10.600	18.420	31730	18	8.256	23.560					31894	13	9.290	9.694	31966	16	12.134	14.114
31659	10	10.770	18.028	31731	12	9.000	23.821					31895	9	11.406	9.597	31967	16	12.631	14.893
31660*	28	11.040	18.769	31732	17	10.458	23.466					31896	13	16.480	9.646	31968	31	13.152	14.386
31661	10	13.694	18.638	31733	21	11.417	23.397					31897	14	19.088	9.224	31969	14	15.574	14.948
31662	20	15.915	18.285	31734	12	12.704	23.196					31898	13	20.276	9.425	31970	16	17.298	14.745
31663*	45	16.335	18.942	31735	22	15.250	23.740					31899	15	21.040	9.685	31971	17	19.892	14.212
31664	12	20.170	18.152	31736	18	16.116	23.453					31900	17	24.696	9.382	31972*	46	23.920	14.312
31665	35	20.796	18.226	31737	19	16.930	23.181					31901	30	24.704	9.614	31973	23	24.422	14.177
31666	10	20.837	18.630	31738	9	18.716	23.879					31902	22	0.044	10.176	31974	12	24.591	14.856
31667	10	23.958	18.585	31739	10	19.303	23.677					31903	18	1.256	10.727	31975	14	0.631	15.652
31668	33	2.732	19.700	31740	13	22.625	23.120												



31980	14	5.752	15.126	32052	11	5.052	20.076	32124	14	25.382	24.676	32191	10	17.803	2.861	32263	8	5.478	7.782
31981	17	10.733	15.924	32053	15	5.072	20.111	32125	15	4.428	25.714	32192	15	17.932	2.199	32264	25	9.450	7.500
31982	15	13.994	15.166	32054	12	8.808	20.702	32126	32	8.378	25.752	32193	19	21.520	2.876	32265	26	9.506	7.332
31983	20	14.156	15.456	32055	18	10.918	20.972	32127	20	11.430	25.794	32194	12	25.842	2.263	32266	12	9.937	7.141
31984	12	15.602	15.934	32056	13	14.129	20.851	32128	19	13.670	25.578	32195	13	3.804	3.092	32267	31	11.916	7.169
31985	26	15.900	15.964	32057	21	14.716	20.242	32129	13	14.283	25.532	32196	28	5.296	3.608	32268	10	14.666	7.120
31986	15	15.910	15.368	32058	11	15.062	20.449	32130	16	17.159	25.745	32197	23	9.184	3.778	32269	12	20.712	7.110
31987	16	17.616	15.720	32059	18	15.294	20.765	32131	18	18.758	25.634	32198	23	12.984	3.924	32270	8	21.321	7.890
31988	14	18.048	15.888	32060	12	15.495	20.147	32132	14	20.900	25.880	32199	12	13.012	3.368	32271	8	21.364	7.960
31989	12	22.619	15.322	32061	12	16.148	20.610	32133	13	25.446	25.458	32200	24	13.812	3.841	32272	29	21.508	7.866
31990	17	24.206	15.658	32062	16	16.702	20.902					32201	28	14.358	3.313	32273	13	22.205	7.450
31991	13	0.108	16.710	32063	28	17.170	20.040					32202	10	14.438	3.776	32274	16	22.579	7.166
31992	15	1.656	16.764	32064	13	19.114	20.076					32203	16	15.140	3.510	32275	9	24.676	7.012
31993	13	5.788	16.252	32065	11	21.564	20.041					32204	13	16.442	3.893	32276	34	0.036	8.284
31994	11	8.065	16.744	32066*	34	23.118	20.674					32205*	38	16.638	3.187	32277	9	0.292	8.173
31995	11	8.084	16.231	32067	13	23.557	20.064					32206	8	17.664	3.187	32278	21	0.674	8.298
31996	11	8.313	16.663	32068*	28	2.621	21.104					32207	11	18.929	3.929	32279	10	0.844	8.234
31997	22	9.458	16.876	32069	12	5.324	21.286					32208	17	19.524	3.910	32280	8	2.544	8.597
31998	14	9.525	16.910	32070	12	7.782	21.616					32209	9	20.186	3.664	32281	8	8.092	8.162
31999	14	13.222	16.656	32071	14	10.806	21.061					32210	12	3.816	4.224	32282	9	8.582	8.346
32000	19	13.296	16.992	32072*	36	14.043	21.240					32211	8	10.447	4.760	32283*	38	9.474	8.974
32001	14	14.040	16.262	32073	11	14.444	21.754					32212	11	11.001	4.725	32284	24	11.452	8.683
32002	15	16.610	16.398	32074	13	14.816	21.051					32213	26	12.830	4.748	32285	12	14.491	8.174
32003	12	16.755	16.722	32075	13	15.449	21.964					32214	9	14.562	4.919	32286	12	16.382	8.375
32004	12	18.703	16.318	32076	31	16.755	21.861					32215	16	15.832	4.750	32287	32	17.344	8.806
32005	34	19.372	16.956	32077	20	18.608	21.668					32216	10	16.260	4.282	32288	11	18.374	8.124
32006	19	22.474	16.138	32078	16	21.245	21.838					32217	38	16.920	4.750	32289	33	18.790	8.263
32007	14	0.939	17.138	32079	20	23.810	21.865					32218	19	17.164	4.524	32290	26	19.128	8.824
32008	14	1.916	17.196	32080	11	23.962	21.521					32219	12	17.439	4.744	32291	13	19.153	8.218
32009	12	2.994	17.880	32081	13	25.868	21.902					32220	29	17.750	4.584	32292	10	19.590	8.398
32010	15	7.550	17.364	32082	13	0.208	22.325					32221	10	21.036	4.062	32293	26	22.200	8.814
32011	16	8.238	17.042	32083	18	4.908	22.226					32222	14	21.642	4.398	32294	8	25.185	8.404
32012	10	10.932	17.416	32084	14	7.591	22.310					32223	11	22.153	4.325	32295	22	25.342	8.265
32013	26	11.218	17.087	32085	13	7.635	22.550					32224	31	25.314	4.146	32296	19	2.665	9.406
32014	12	11.949	17.701	32086	11	7.987	22.024					32225	13	25.948	4.078	32297	32	2.675	9.637
32015	15	13.778	17.308	32087*	22	9.066	22.406					32226	14	0.772	5.876	32298*	69	7.860	9.177
32016	14	15.401	17.036	32088	19	12.154	22.574					32227	15	2.426	5.762	32299	8	18.450	9.535
32017	11	16.785	17.709	32089	14	12.636	22.874					32228	8	4.123	5.705	32300	11	9.102	9.383
32018	20	18.033	17.086	32090*	36	12.756	22.486					32229	16	4.696	5.722	32301	8	13.650	9.762
32019	18	19.470	17.975	32091	22	13.541	22.198					32230	11	7.170	5.480	32302	17	14.363	9.359
32020	24	24.471	17.814	32092	12	16.686	22.300					32231	22	7.198	5.778	32303	14	15.209	9.929
32021	17	25.975	17.768	32093	12	17.336	22.267					32232	34	7.266	5.166	32304*	36	15.804	9.014
32022	14	1.806	18.785	32094	17	21.954	22.510					32233	10	8.816	5.128	32305	25	16.424	9.514
32023	10	3.272	18.200	32095	15	0.508	23.334					32234	11	10.838	5.032	32306	25	18.554	9.061
32024	16	5.172	18.612	32096	18	2.666	23.184					32235	16	12.788	5.040	32307	34	21.942	9.936
32025	11	8.956	18.387	32097*	36	3.504	23.274					32236	11	13.450	5.910	32308	8	24.420	9.486
32026	13	10.255	18.690	32098*	52	6.628	23.532					32237	23	13.954	5.592	32309	8	24.766	9.746
32027	22	10.820	18.701	32099*	66	6.842	23.582					32238	8	15.420	5.818	32310	34	25.595	9.950
32028	14	10.900	18.488	32100	17	8.608	23.199					32239	12	16.085	5.424	32311	8	0.558	10.504
32029	11	12.350	18.965	32101	13	8.804	23.760					32240	10	17.116	5.714	32312	8	1.484	10.900
32030	15	12.820	18.618	32102	18	8.898	23.406					32241	12	22.875	5.405	32313	21	1.957	10.214
32031	16	13.850	18.201	32103	19	15.834	23.817					32242	45	25.634	5.814	32314	8	2.610	10.234
32032	19	13.866	18.238	32104	15	15.900	23.468					32243	9	3.378	6.322	32315	8	4.481	10.318
32033	24	23.702	18.838	32105	13	17.012	23.228					32244	14	5.763	6.730	32316	28	4.685	10.866
32034	16	0.921	19.692	32106	16	20.784	23.161					32245	36	6.042	6.162	32317	19	4.812	10.877
32035	10	2.767	19.058	32107	14	24.232	23.740					32246	8	7.321	6.520	32318	22	4.838	10.830
32036	13	3.902	19.071	32108	25	24.342	23.152					32247*	40	7.932	6.309	32319	22	7.287	10.174
32037	23	6.430	19.800	32109	20	0.614	24.942					32248	16	8.640	6.220	32320	8	7.510	10.820
32038	12	6.651	19.745	32110	16	2.697	24.785					32249	20	14.410	6.979	32321	8	9.236	10.562
32039	15	7.602	19.752	32111*	36	3.465	24.307					32250	8	15.110	6.412	32322	23	13.375	10.290
32040	18	10.746	19.368	32112	15	3.560	24.638					32251	24	16.575	6.530	32323	8	16.637	10.366
32041	15	11.076	19.544	32113	16	5.369	24.978					32252	13	16.833	6.861	32324	23	20.611	10.042
32042	12	12.970	19.048	32114	15	6.570	24.648					32253	14	17.570	6.758	32325	16	22.227	10.610
32043	16	16.824	19.856	32115	13	8.076	24.926					32254	15	18.784	6.496	32326	24	24.040	10.544
32044	18	17.343	19.445	32116	36	8.800	24.342					32255	14	22.543	6.868	32327	17	25.334	10.097
32045	15	18.572	19.033	32117*	36	8.809	24.330					32256	25	23.066	6.246	32328	12	25.428	10.372
32046	15	20.452	19.586	32118	16	8.897	24.900					32257	14	24.810	6.194	32329	8	1.357	11.232
32047	26	22.158	19.698	32119	22	12.742	24.827					32258	23	25.034	6.752	32330	8	1.612	11.019
32048	13	22.688	19.078	32120	12	15.282	24.858					32259	15	0.676	7.384	32331	11</		



32335	23	12.746	11.978	32407	12	6.252	16.981	32479	10	15.562	20.222	32656	28	20.250	5.930
32336	10	13.295	11.139	32408	10	6.800	16.236	32480	10	16.454	20.626	32657	17	0.878	6.370
32337	11	13.873	11.380	32409	33	10.879	16.665	32481	9	17.644	20.732	32658	12	2.624	6.302
32338	11	16.382	11.849	32410	10	12.260	16.873	32482*	40	22.170	20.401	32659	18	2.855	6.862
32339	17	16.408	11.854	32411	14	13.289	16.704	32483*	37	22.756	20.316	32660	9	4.070	6.466
32340	12	20.539	11.982	32412	12	14.452	16.737	32484	26	24.600	20.500	32661	43	5.426	6.244
32341*	90	23.150	11.882	32413	31	17.339	16.816	32485	29	1.971	21.902	32662	12	16.744	6.846
32342	10	1.210	12.160	32414*	41	17.542	16.629	32486	8	3.574	21.821	32663	10	17.109	6.980
32343	13	1.974	12.808	32415	8	18.005	16.663	32487	14	4.030	21.909	32664*	51	17.380	6.901
32344	24	4.023	12.128	32416	28	20.281	16.474	32488	26	5.708	21.674	32665	20	19.253	6.522
32345	12	5.230	12.352	32417	8	21.566	16.976	32489	8	6.561	21.160	32666	8	20.900	6.884
32346	11	6.862	12.859	32418	12	21.904	16.116	32490	8	12.621	21.691	32667*	43	21.726	6.316
32347	12	9.814	12.761	32419	10	22.089	16.168	32491	14	12.933	21.920	32668	20	25.092	6.055
32348	9	10.860	12.485	32420	8	23.330	16.522	32492	8	12.948	21.828	32669	8	0.400	7.298
32349	28	13.672	12.998	32421	8	25.014	16.659	32493	19	13.534	21.916	32670	35	4.607	7.649
32350	16	14.735	12.656	32422	9	2.412	17.249	32494	14	19.864	21.000	32671*	41	5.499	7.166
32351	9	16.713	12.871	32423	31	2.566	17.840	32495	10	22.133	21.001	32672*	41	6.034	7.626
32352	9	20.453	12.859	32424	8	4.065	17.686	32496	10	25.146	21.778	32673	30	6.608	7.390
32353	10	22.192	12.522	32425	18	4.070	17.771	32497	15	0.124	22.575	32674	8	8.700	7.576
32354	10	22.698	12.520	32426	9	4.620	17.360	32498	13	6.529	22.012	32675	8	9.307	7.712
32355*	45	23.044	12.588	32427	11	5.560	17.519	32499	8	6.766	22.142	32676	8	9.683	7.938
32356	24	24.438	12.680	32428	21	5.825	17.874	32500	13	7.029	22.288	32677*	41	12.966	7.089
32357	8	1.776	13.200	32429	24	6.406	17.038	32501	26	9.969	22.670	32678	35	13.300	7.466
32358	23	5.612	13.596	32430	8	8.785	17.063	32502	11	12.095	22.059	32679	8	14.200	7.852
32359	12	6.800	13.565	32431	10	8.950	17.300	32503	12	12.910	22.164	32680	9	14.936	7.358
32360	18	9.934	13.248	32432	9	9.274	17.205	32504	8	13.092	22.314	32681	8	15.597	7.750
32361	8	11.036	13.030	32433	8	9.367	17.620	32505	19	19.748	22.878	32682*	80	16.606	7.218
32362	9	11.244	13.900	32434	10	10.418	17.204	32506	28	22.438	22.754	32683	9	21.854	7.840
32363	14	12.669	13.828	32435	10	10.571	17.881	32507	12	23.049	22.900	32684	10	23.789	7.834
32364	11	12.814	13.448	32436	10	12.920	17.144	32508	19	24.222	22.049	32685	8	23.964	7.622
32365	10	16.535	13.816	32437	21	13.236	17.694	32509	15	25.736	22.213	32686	16	0.040	8.950
32366*	36	16.608	13.115	32438	8	14.086	17.107	32510	17	2.420	23.768	32687	15	3.180	8.365
32367*	46	17.342	13.866	32439	11	16.261	17.053	32511	29	2.522	23.179	32688	21	5.114	8.824
32368	12	18.772	13.886	32440	21	16.815	17.950	32512	10	3.860	23.584	32689	19	5.548	8.512
32369	8	18.841	13.606	32441	13	17.404	17.338	32513*	42	5.589	23.530	32690	15	5.612	8.671
32370	9	18.870	13.512	32442	12	17.796	17.128	32514	22	9.782	23.071	32691*	44	5.810	8.460
32371	13	21.896	13.776	32443	30	1.816	18.873	32515	9	10.417	23.784	32692*	8	12.870	8.730
32372*	40	1.964	14.344	32444	10	5.170	18.978	32516	13	10.794	23.896	32693	11	19.378	8.288
32373	29	2.464	14.208	32445	19	6.280	18.828	32517	11	13.820	23.002	32694	34	20.590	8.656
32374	11	2.642	14.885	32446	9	7.744	18.569	32518	12	13.890	23.201	32695	42	20.755	8.075
32375	9	3.086	14.514	32447	11	9.133	18.390	32519*	39	15.896	23.431	32696	13	0.372	9.904
32376	10	3.484	14.818	32448	8	11.030	18.761	32520	17	16.027	23.778	32697	8	2.620	9.856
32377	10	4.446	14.652	32449	8	12.890	18.526	32521	20	16.096	23.356	32698	9	8.492	9.546
32378	10	6.055	14.032	32450	17	16.113	18.297	32522	8	16.186	23.218	32699	16	9.132	9.790
32379	31	6.268	14.686	32451	19	16.350	18.513	32523*	36	18.695	23.268	32700	11	15.174	9.660
32380	12	7.262	14.058	32452	11	20.458	18.090	32524	10	22.567	23.978	32701	31	16.094	9.146
32381	12	8.022	14.582	32453	32	21.673	18.446	32525	8	25.634	23.470	32702	14	17.400	9.510
32382	25	8.181	14.896	32454	30	22.267	18.836	32526	20	1.755	24.067	32703	31	18.202	9.650
32383	10	10.612	14.154	32455	9	22.560	18.130	32527	10	3.320	24.540	32704	8	18.538	9.376
32384*	44	12.736	14.062	32456	27	0.284	19.758	32528	12	3.585	24.689	32705	10	22.824	9.478
32385	10	14.726	14.130	32457	10	0.804	19.130	32529	15	7.595	24.711	32706	19	23.776	9.424
32386*	36	17.910	14.273	32458	13	4.144	19.650	32530	27	10.291	24.445	32707	11	0.086	10.746
32387	8	19.074	14.050	32459	8	4.700	19.568	32531	12	12.364	24.268	32708	23	1.898	10.660
32388	14	20.050	14.033	32460	10	5.195	19.534	32532	12	12.806	24.668	32709	12	3.188	10.200
32389	19	23.716	14.650	32461	30	6.500	19.794	32533*	50	14.054	24.066	32710	13	3.286	10.472
32390	26	25.675	14.012	32462	12	8.478	19.668	32534	23	14.316	24.218	32711	36	3.448	10.046
32391	8	0.679	15.378	32463	26	10.748	19.666	32535	17	14.635	24.236	32712	9	6.960	10.576
32392	16	2.271	15.690	32464	9	13.389	19.566	32536	8	17.765	24.918	32713	13	7.799	10.594
32393*	36	8.430	15.310	32465	15	15.749	19.870	32537	9	18.242	24.790	32714	8	14.300	10.574
32394	10	9.005	15.639	32466	8	16.842	19.568	32538	32	18.380	24.300	32715	10	19.785	10.054
32395	27	9.596	15.200	32467	8	17.777	19.107	32539	8	25.302	24.974	32716	42	19.845	10.616
32396	10	11.414	15.524	32468	8	18.640	19.840	32540	11	6.573	25.671	32717	8	21.742	10.100
32397	10	12.770	15.094	32469	19	24.470	19.968	32541	8	8.544	25.110	32718	13	22.036	10.905
32398	12	13.886	15.076	32470	13	25.148	19.870	32542	8	8.723	25.962	32719	13	22.821	10.594
32399	34	15.807	15.448	32471	10	25.760	19.508	32543	8	9.172	25.871	32720	15	23.574	10.025
32400	12	17.924	15.600	32472*	36	1.258	20.719	32544	16	14.066	25.802	32721	9	4.925	11.735
32401	16	18.425	15.830	32473	8	1.687	20.106	32545	35	15.764	25.772	32722	14	5.578	11.624
32402	11	18.942	15.823	32474	9	3.116	20.272	32546	27	16.698	25.033	32723*	41	7.914	11.750
32403	8	21.186	15.873	32475	9	3.916	20.654	32547	9	16.851	25.981	32724	9	10.978	11.916
32404	8	23.573	15.524	32476*	42	6.256	20.175	32548	34	18.458	25.963	32725	14	15.041	11.374
32405	25	0.546	16.194	32477	35	8.289	20.378	32549	9	19.324	25.706	32726	25	23.781	11.852
32406	12	5.188	16.481	32478	22	11.700	20.496	32550	17	22.897	25.129	32727	9	24.002	11.898

R.A. 9<sup>h</sup> 32<sup>m</sup>

Plate 967; 1917 Feb. 13.

Provisional Constants.

A B C  
 -0.2551 +0.0523 +2.009

D E F  
 -0.0522 -0.2567 -2.230

Mag. = 16.5 - 1.09√d

No.	d	x	y
32601	40	7.892	0.59
32602	50	14.822	0.55
32603	8	16.774	0.38
32604	34	17.838	0.69
32605	14	20.296	0.02
32606	11	22.265	0.63
32607	18	23.078	0.26
32608	21	25.540	0.55
32609	9	0.496	1.65
32610	16	0.520	1.41
32611	39	0.940	1.58
32612	8	3.778	1.33
32613	11	5.776	1.21
32614	8	6.944	1.22
32615	14	10.735	1.90
32616	14	13.684	1.08
32617*	36	23.774	1.38
32618*	47	23.828	1.02
32619	13	3.618	2.35
32620	37	3.757	2.01
32621	10	10.072	2.90
32622*	49	11.764	2.93
32623	37	15.227	2.70
32624	20	16.390	2.07
32625	12	16.560	2.63
32626*	43	16.744	2.75
32627	8	20.620	2.53
32628	10	25.449	2.98
32629	8	5.320	3.85
32630	8	5.406	3.33
32631	11	9.866	3.19
32632	36	10.600	3.55
32633	32	11.384	3.51
32634	22	13.911	3.18
32635	11	14.981	3.71
32636	12	16.996	3.12
32637*	38	17.454	3.20
32638	36	20.160	3.25
32639	11	20.944	3.86
32640	9	21.382	3.55
32641	34	3.105	4.24
32642	12	3.738	4.17
32643*	50	6.616	4.33
32644	31	6.988	4.58
32645	18	8.970	4.13
32646	35	13.680	4.56
32647	16	18.265	4.98
32648	9	0.680	5.53
32649*	45	3.440	5.91
32650	36	11.016	5.86
32651	8	11.426	5.16
32652	26	15.701	5.15
32653	20	16.596	5.68
32654	13	17.480	5.85
32655	17	17.940	5.73



32728	9	0.070	12.660	32800	13	22.907	21.780	32864	36	11.850	1.806	32936	40	23.220	9.636	33008	20	12.436	16.406
32729*	46	0.922	12.711	32801	32	23.330	21.356	32865	24	12.440	1.434	32937	25	0.549	10.794	33009	18	14.054	16.889
32730*	111	1.016	12.004	32802	9	24.464	21.726	32866	10	20.463	1.238	32938	29	1.296	10.214	33010	25	14.340	16.950
32731	15	2.322	12.795	32803	35	0.430	22.889	32867	34	21.100	1.900	32939	24	7.428	10.557	33011	21	22.658	16.622
32732	11	7.121	12.382	32804	22	2.208	22.162	32868	39	25.008	1.098	32940	20	9.541	10.840	33012*	31	23.957	16.724
32733	13	14.238	12.204	32805	14	3.727	22.312	32869	19	3.848	2.541	32941	17	11.542	10.249	33013*	38	24.070	16.682
32734	10	16.674	12.333	32806	25	4.116	22.332	32870	22	7.655	2.348	32942	19	12.574	10.819	33014	27	4.616	17.576
32735	33	19.242	12.098	32807	11	4.804	22.210	32871	23	7.814	2.240	32943	20	13.468	10.125	33015	20	7.384	17.448
32736	33	19.843	12.610	32808	37	11.590	22.532	32872	23	15.906	2.966	32944	18	15.104	10.034	33016	17	11.315	17.200
32737*	41	4.476	13.077	32809	32	12.598	22.625	32873	29	20.900	2.177	32945	16	17.014	10.480	33017	14	12.462	17.716
32738*	43	9.428	13.721	32810	26	13.258	22.996	32874	19	21.020	2.675	32946	25	17.904	10.994	33018	17	13.554	17.411
32739	8	16.466	13.871	32811	35	16.211	22.035	32875*	32	22.250	2.516	32947	12	19.118	10.510	33019	22	13.758	17.674
32740*	49	21.615	13.552	32812	40	16.593	22.634	32876	25	3.092	3.147	32948	29	19.466	10.464	33020	27	14.467	17.444
32741	26	22.692	13.174	32813	13	22.974	22.396	32877	22	5.091	3.074	32949	26	23.230	10.628	33021	23	17.076	17.989
32742	15	1.620	14.768	32814	36	25.365	22.276	32878	15	5.942	3.486	32950*	78	24.104	10.658	33022	24	19.377	17.046
32743	30	3.572	14.114	32815	8	3.636	23.568	32879*	36	7.438	3.123	32951	22	24.673	10.036	33023	27	24.823	17.004
32744	11	8.453	14.975	32816	34	4.148	23.704	32880	13	15.682	3.199	32952	16	6.140	11.510	33024	21	25.379	17.253
32745	25	9.302	14.626	32817	10	7.190	23.630	32881*	56	15.800	3.553	32953	26	7.313	11.994	33025	24	25.510	17.900
32746*	88	9.938	14.000	32818	22	8.884	23.068	32882	36	18.560	3.201	32954	16	8.445	11.207	33026	36	3.224	18.998
32747	39	10.110	14.000	32819*	41	11.994	23.450	32883	30	20.220	3.579	32955	20	9.508	11.808	33027	26	6.392	18.921
32748*	49	17.420	14.450	32820	22	13.958	23.396	32884	14	5.048	4.692	32956	21	10.165	11.846	33028	14	8.414	18.350
32749	13	19.842	14.260	32821	24	14.084	23.272	32885*	44	6.384	4.609	32957	26	13.576	11.599	33029	23	9.008	18.512
32750	24	7.689	15.218	32822	35	22.318	23.812	32886	19	6.469	4.914	32958	18	14.084	11.940	33030*	36	12.552	18.113
32751	17	10.087	15.995	32823	29	4.695	24.938	32887	21	6.679	4.762	32959	34	22.915	11.352	33031	12	14.354	18.057
32752	10	10.530	15.548	32824	9	5.586	24.808	32888	34	7.642	4.774	32960	34	1.524	12.037	33032	20	17.586	18.526
32753	15	16.630	15.672	32825	19	11.790	24.134	32889	16	13.180	4.731	32961	19	1.748	12.086	33033	21	20.038	18.326
32754	8	20.103	15.579	32826	9	13.242	24.587	32890	22	14.778	4.932	32962	28	6.958	12.554	33034*	50	23.344	18.244
32755	14	23.808	15.764	32827	14	18.772	24.820	32891	20	16.414	4.808	32963	21	11.072	12.120	33035	16	4.718	19.041
32756	18	3.958	16.246	32828	41	11.229	25.340	32892	27	17.932	4.400	32964*	56	13.166	12.377	33036	24	10.760	19.831
32757	8	4.570	16.572	32829	9	14.096	25.276	32893	19	3.092	5.684	32965	17	13.360	12.450	33037	11	11.358	19.954
32758	16	5.558	16.433	32830	45	14.263	25.720	32894	25	4.056	5.194	32966	34	20.384	12.594	33038	22	13.394	19.686
32759	40	5.775	16.800	32831	47	17.676	25.103	32895	20	16.541	5.794	32967	37	21.602	12.226	33039	20	16.507	19.276
32760	18	6.086	16.854	32832	21	20.908	25.572	32896	20	19.588	5.412	32968	30	0.448	13.374	33040	22	17.810	19.794
32761	15	12.010	16.784	32833	44	22.464	25.888	32897	39	23.202	5.804	32969	19	3.734	13.172	33041	28	20.194	19.902
32762	16	13.481	16.666	32834	37	22.935	25.196	32898	32	2.772	6.228	32970	18	5.329	13.536	33042	20	22.429	19.483
32763	26	13.682	16.443					32899	26	5.303	6.987	32971	19	6.543	13.778	33043	18	3.102	20.716
32764	8	15.490	16.684					32900	19	5.904	6.375	32972	28	7.650	13.331	33044*	42	5.152	20.872
32765	34	18.184	16.188					32901	30	6.522	6.724	32973*	26	8.398	13.258	33045	32	5.244	20.099
32766*	43	22.406	16.618					32902	12	11.534	6.257	32974	20	8.433	13.991	33046	26	7.366	20.518
32767*	44	5.364	17.727					32903	25	13.478	6.184	32975*	56	11.158	13.311	33047	15	12.466	20.286
32768	13	8.936	17.710					32904	24	15.194	6.700	32976	21	14.070	13.206	33048	36	17.401	20.098
32769	8	9.184	17.685					32905	34	16.959	6.524	32977	22	15.040	13.538	33049	17	17.486	20.088
32770	11	12.436	17.298					32906	28	20.526	6.738	32978*	56	15.526	13.864	33050	24	19.900	20.376
32771	9	14.154	17.448					32907*	56	22.132	6.046	32979	14	17.766	13.880	33051	21	20.076	20.454
32772	29	17.334	17.314					32908	16	24.091	6.906	32980	28	21.556	13.010	33052	38	22.170	20.054
32773	37	17.458	17.966					32909	22	24.834	6.572	32981	14	2.704	14.864	33053	36	23.216	20.708
32774	34	0.216	18.968					32910	40	25.015	6.076	32982	21	5.526	14.193	33054	17	0.760	21.976
32775	24	9.054	18.402					32911	18	1.658	7.812	32983	27	9.836	14.983	33055	36	1.178	21.547
32776	16	10.876	18.048					32912	19	5.034	7.513	32984	22	9.844	14.664	33056	22	2.319	21.905
32777	8	13.762	18.043					32913	34	5.298	7.620	32985	34	14.317	14.882	33057	25	10.462	21.125
32778	12	14.212	18.658					32914	12	6.580	7.557	32986	17	19.022	14.052	33058	17	11.038	21.894
32779	33	25.405	18.828					32915	12	8.458	7.030	32987	27	19.511	14.144	33059	20	14.549	21.029
32780	11	3.110	19.971					32916	22	8.876	7.566	32988	22	20.886	14.180	33060	12	17.188	21.805
32781	8	3.718	19.610					32917	27	12.608	7.448	32989	26	21.850	14.516	33061	17	17.988	21.304
32782	18	5.166	19.381					32918	20	13.394	7.026	32990	11	23.060	14.600	33062	25	20.358	21.184
32783	23	5.776	19.072					32919	17	14.598	7.930	32991*	72	25.022	14.558	33063	26	20.499	21.758
32784	9	9.627	19.539					32920	31	18.316	7.205	32992	32	1.596	15.953	33064	24	21.850	21.950
32785	32	12.044	19.951					32921	20	20.458	7.708	32993	29	8.772	15.038	33065	25	24.636	21.302
32786	32	19.056	19.310					32922	18	23.328	7.107	32994	18	9.040	15.573	33066	17	0.833	22.592
32787	36	21.158	19.388					32923	34	23.340	7.010	32995	28	14.250	15.660	33067	36	3.224	22.448
32788	44	0.135	20.538					32924	29	1.490	8.021	32996	10	14.509	15.220	33068*	40	4.874	22.978
32789*	41	0.720	20.444					32925	12	1.743	8.147	32997*	42	15.636	15.294	33069	20	9.756	22.186
32790	18	2.430	20.076					32926	24	9.980	8.128	32998*	78	16.788	15.568	33070	29	11.180	22.408
32791	27	2.566	20.608					32927	32	11.739	8.816	32999	15	18.776	15.954	33071	37	12.560	22.660
32792	10	11.790	20.684					32928	18	14.216	8.551	33000	28	19.448	15.725	33072	24	13.536	22.033
32793	15	19.034	20.360					32929	20	14.794	8.122	33001	27	20					



33080	24	6.308	23.721	33173*	66	8.322	2.963	33245	10	24.924	9.560	33317*	39	16.192	16.572	33389	15	25.370	22.708
33081	30	7.608	23.905	33174	40	9.118	2.796	33246	20	1.017	10.663	33318	21	18.244	16.298	33390	10	1.207	23.776
33082*	76	9.706	23.106	33175	15	19.712	2.661	33247*	66	1.889	10.688	33319	32	18.704	16.872	33391	8	10.222	23.899
33083	23	14.478	23.574	33176	12	21.017	2.001	33248	12	2.456	10.058	33320	29	19.108	16.351	33392	32	17.413	23.815
33084*	36	16.448	23.900	33177	9	21.230	2.323	33249	17	6.676	10.779	33321	33	21.382	16.550	33393	11	19.583	23.574
33085*	46	19.208	23.138	33178*	36	24.400	2.877	33250	31	8.996	10.008	33322	19	2.670	17.023	33394	31	24.506	23.148
33086	28	0.199	24.010	33179	18	8.474	3.035	33251	10	17.776	10.948	33323	13	3.232	17.264	33395	16	4.834	24.227
33087	20	5.205	24.338	33180	14	11.041	3.768	33252	10	21.014	10.383	33324	20	3.368	17.919	33396	27	5.060	24.587
33088*	44	6.634	24.462	33181	26	15.591	3.555	33253	24	23.706	10.185	33325	10	6.873	17.909	33397	17	6.640	24.559
33089	34	15.666	24.291	33182	28	18.404	3.088	33254	26	0.710	11.392	33326	26	7.792	17.880	33398	13	13.394	24.951
33090*	44	16.919	24.027	33183	12	22.366	3.634	33255	8	4.542	11.154	33327*	39	7.844	17.978	33399	28	19.773	24.848
33091	21	17.366	24.850	33184	9	3.901	4.674	33256	11	8.385	11.079	33328	15	8.850	17.142	33400	16	21.949	24.508
33092	39	0.824	25.396	33185	8	4.712	4.706	33257	10	11.058	11.286	33329	9	12.510	17.383	33401	17	1.506	25.690
33093	16	1.918	25.844	33186	19	5.788	4.889	33258	12	11.634	11.168	33330	26	13.208	17.989	33402	14	2.870	25.153
33094	28	4.944	25.105	33187	9	8.990	4.330	33259	11	10.524	11.900	33331	12	14.712	17.658	33403	18	6.386	25.285
33095	33	8.729	25.409	33188	8	17.508	4.092	33260	9	5.572	12.129	33332	34	17.448	17.292	33404	13	8.352	25.048
33096	20	9.521	25.814	33189	38	20.324	4.890	33261*	42	9.888	12.290	33333	24	17.556	17.316	33405	10	8.545	25.260
33097	17	9.658	25.375	33190	40	0.947	5.839	33262	35	10.507	12.942	33334	8	18.566	17.028	33406	25	9.392	25.139
33098	27	10.491	25.466	33191	27	5.358	5.228	33263*	57	15.078	12.558	33335	34	20.971	17.780	33407	11	13.417	25.765
33099	17	11.300	25.140	33192	14	7.080	5.630	33264	36	15.106	12.556	33336	12	21.388	17.196	33408	10	13.950	25.843
33100	19	13.828	25.266	33193	13	11.798	5.512	33265	15	15.429	12.947	33337*	48	21.838	17.999	33409	11	20.510	25.918
33101	16	13.956	25.520	33194	10	13.027	5.785	33266	29	20.278	12.200	33338	12	23.191	17.788	33410	19	25.698	25.141
33102	24	15.925	25.891	33195	12	18.972	5.567	33267	9	22.042	12.608	33339	14	25.335	17.916				
33103	25	19.330	25.054	33196	14	19.720	5.393	33268	14	24.718	12.917	33340*	50	1.202	18.278				
33104	23	23.572	25.658	33197	12	1.846	6.935	33269	11	25.298	12.245	33341	17	3.597	18.298				
33105	12	24.942	25.132	33198	23	2.584	6.596	33270	26	4.052	13.340	33342	31	8.512	18.440				
				33199	35	2.762	6.100	33271	13	5.608	13.608	33343	8	12.617	18.416				
				33200	8	6.954	6.327	33272	15	5.978	13.914	33344	13	14.310	18.084				
				33201	20	8.372	6.719	33273	10	7.899	13.426	33345*	58	20.396	18.312				
				33202	11	12.736	6.139	33274	11	11.713	13.058	33346	14	0.300	19.526				
				33203	21	15.780	6.198	33275	8	14.792	13.196	33347	10	7.076	19.024				
				33204	32	17.836	6.719	33276	13	17.141	13.710	33348*	43	7.638	19.980				
				33205*	82	18.687	6.960	33277	14	17.672	13.188	33349*	51	10.364	19.118				
				33206	11	20.682	6.472	33278	15	17.729	13.252	33350	13	11.246	19.568				
				33207	13	21.890	6.620	33279	12	22.252	13.799	33351	9	11.740	19.104				
				33208	10	22.154	6.254	33280*	60	2.846	14.576	33352	8	16.522	19.280				
				33209	26	24.083	6.006	33281	11	4.152	14.383	33353	11	20.550	19.118				
				33210	20	1.086	7.146	33282	29	5.404	14.940	33354	12	21.782	19.594				
				33211	27	1.098	7.049	33283*	49	9.490	14.718	33355	36	0.048	20.100				
				33212	10	1.709	7.373	33284	20	13.394	14.750	33356	20	1.098	20.744				
				33213	8	2.380	7.734	33285	13	13.554	14.194	33357	9	5.327	20.170				
				33214	10	6.042	7.518	33286	28	14.300	14.240	33358	8	5.549	20.411				
				33215	12	6.572	7.568	33287	10	16.490	14.805	33359	10	5.824	20.046				
				33216	30	8.456	7.938	33288	14	17.438	14.752	33360	8	7.220	20.832				
				33217	10	16.649	7.822	33289	35	20.734	14.935	33361*	36	8.273	20.242				
				33218	10	20.108	7.207	33290*	62	21.080	14.773	33362	23	10.221	20.488				
				33219	32	20.981	7.379	33291	21	21.860	14.837	33363	37	11.612	20.938				
				33220	11	21.743	7.278	33292	10	22.701	15.900	33364	10	17.519	20.962				
				33221	25	25.104	7.645	33293	8	25.917	14.200	33365	32	18.704	20.673				
				33222	9	25.679	7.793	33294	16	1.120	15.360	33366*	37	20.309	20.418				
				33223	8	9.676	8.146	33295	23	3.278	15.630	33367	14	21.440	20.827				
				33224	13	9.950	8.648	33296	29	3.730	15.496	33368	13	2.528	21.326				
				33225	8	11.985	8.936	33297	8	6.520	15.781	33369	9	5.104	21.018				
				33226	29	12.133	8.197	33298	28	8.900	15.984	33370*	40	5.448	21.892				
				33227	18	14.004	8.430	33299	36	9.567	15.063	33371	10	8.622	21.287				
				33228	10	14.169	8.638	33300*	40	10.382	15.806	33372	13	10.598	21.868				
				33229	11	15.672	8.459	33301	11	13.336	15.446	33373	31	12.546	21.992				
				33230	12	16.817	8.456	33302	8	15.258	15.019	33374	27	12.898	21.518				
				33231	8	23.634	8.460	33303*	52	22.457	15.182	33375	32	14.318	21.850				
				33232	8	24.798	8.989	33304	8	24.767	15.238	33376	8	15.036	21.974				
				33233	39	1.000	9.674	33305	9	0.507	16.664	33377	17	16.882	21.023				
				33234	12	5.378	9.622	33306*	30	1.802	16.752	33378*	43	17.308	21.982				
				33235	21	6.992	9.794	33307*	38	1.916	16.710	33379	11	22.358	21.220				
				33236	16	9.142	9.762	33308	31	4.327	16.722	33380	10	25.190	21.938				
				33237	24	10.119	9.570	33309	8	4.537	16.833	33381	23	25.697	21.650				
				33238	8	10.282	9.242	33310	21	4.728	16.140	33382	9	7.890	22.123				
				33239	15	10.460	9.341	33311	9	5.859	16.648	33383	9	7.936	22.650				
				33240*	38	12.501	9.026	33312	31	7.083	16.030	33384	13	8.790	22.037				
				33241	11	13.574	9.500	33313	9	7.597	16.435	33385	14	10.453	22.563				
				33242	10	14.415	9.061	33314	10	10.586	16.634	33386	17	13.672	22.460				
				33243	8	19.677	9.740	33315	10	12.945	16.561	33387	15	19.788	22.468				
				33244	23	24.855	9.642	33316	12	13.419	16.006	33388	10	22.350	22.474				

R.A. 9<sup>h</sup> 56<sup>m</sup>

Plate 983; 1917 Feb. 16.

Provisional Constants.

A	B	C
-0.2596	-0.0070	+2.679



33477	10	17.239	2.093	33549	12	6.229	10.066	33621	12	12.557	16.883	33693	8	20.896	21.280	33755	16	11.998	0.921
33478	24	20.914	2.333	33550	14	9.680	10.774	33622	12	14.766	16.448	33694	13	21.786	21.630	33756	12	0.410	1.728
33479	16	22.900	2.898	33551	10	11.154	10.643	33623	23	22.930	16.364	33695	14	24.971	21.338	33757	42	12.426	1.136
33480	42	22.923	2.098	33552	10	12.998	10.645	33624	10	23.548	16.854	33696	11	25.456	21.144	33758	16	18.112	1.471
33481	20	25.322	2.106	33553	10	14.916	10.812	33625	16	24.542	16.915	33697	13	0.508	22.546	33759	14	20.002	1.942
33482	12	9.010	3.477	33554	14	15.420	10.485	33626	12	24.654	16.744	33698	22	3.530	22.754	33760	37	20.875	1.220
33483	10	9.167	3.426	33555	10	16.138	10.830	33627	11	1.310	17.850	33699	13	7.518	22.354	33761	19	25.436	1.236
33484	21	11.911	3.171	33556	10	20.320	10.240	33628	15	3.454	17.961	33700	25	7.885	22.553	33762	34	0.532	2.407
33485	27	13.388	3.843	33557	11	4.660	11.936	33629	10	6.773	17.490	33701	52	9.096	22.710	33763	25	2.936	2.374
33486	13	14.877	3.000	33558	14	4.724	11.121	33630	15	6.935	17.174	33702	10	10.500	22.087	33764	22	15.242	2.685
33487	11	20.810	3.748	33559	14	5.030	11.964	33631	10	7.578	17.111	33703	8	12.431	22.370	33765	36	17.630	2.872
33488	10	23.362	3.435	33560	12	13.572	11.090	33632	24	8.990	17.790	33704	13	13.057	22.820	33766	23	17.772	2.963
33489	10	4.804	4.148	33561	12	19.274	11.354	33633	20	9.008	17.868	33705	17	14.285	22.232	33767*	70	17.782	2.250
33490	10	6.457	4.145	33562	17	19.330	11.498	33634	13	9.053	17.504	33706	11	17.616	22.215	33768	20	22.250	2.394
33491	15	11.532	4.140	33563	11	21.750	11.055	33635	31	12.643	17.866	33707	8	18.070	22.698	33769	26	25.471	2.526
33492	11	11.790	4.187	33564*	39	22.796	11.954	33636	8	12.910	17.101	33708	20	22.114	22.852	33770	13	0.527	3.212
33493	10	14.440	4.007	33565*	48	23.144	11.616	33637	11	13.166	17.860	33709	15	24.104	22.964	33771	14	5.684	3.836
33494	15	14.883	4.668	33566	10	0.118	12.680	33638	14	14.071	17.650	33710	29	2.666	23.200	33772	12	7.686	3.756
33495	10	20.078	4.374	33567	17	2.796	12.968	33639	16	15.549	17.632	33711	29	6.130	23.675	33773	10	13.184	3.057
33496	17	21.664	4.470	33568	10	3.370	12.294	33640	11	17.806	17.404	33712	8	8.394	23.870	33774	8	16.284	3.014
33497	27	24.308	4.793	33569	20	7.096	12.690	33641	13	18.420	17.316	33713	11	12.888	23.265	33775*	39	18.206	3.588
33498	11	25.420	4.846	33570	8	7.590	12.683	33642	9	21.718	17.488	33714*	69	18.150	23.452	33776	24	4.088	4.214
33499	10	6.056	5.001	33571	12	7.652	12.124	33643*	32	21.958	17.365	33715	11	19.300	23.093	33777	25	5.735	4.586
33500	10	6.355	5.169	33572	12	8.367	12.830	33644	9	23.540	17.316	33716	20	20.194	23.404	33778	14	5.961	4.634
33501	11	11.515	5.735	33573	11	10.280	12.706	33645	13	25.420	17.315	33717	16	21.450	23.062	33779	24	11.495	4.710
33502	11	14.984	5.688	33574	13	10.762	12.052	33646	10	5.540	18.490	33718	15	25.615	23.018	33780	20	11.832	4.406
33503	10	15.476	5.668	33575	12	13.210	12.740	33647	13	7.455	18.258	33719	14	25.994	23.384	33781*	41	11.952	4.040
33504	10	20.140	5.294	33576	13	16.435	12.076	33648	16	7.478	18.425	33720	14	0.124	24.582	33782	35	1.965	5.080
33505*	41	21.750	5.445	33577	14	18.310	12.990	33649	21	9.058	18.067	33721	18	8.150	24.005	33783	30	2.174	5.490
33506	14	21.930	5.480	33578	17	20.588	12.350	33650	11	12.336	18.235	33722	27	10.368	24.363	33784	10	3.078	5.116
33507	25	24.508	5.208	33579	11	22.013	12.535	33651	13	13.914	18.696	33723	20	10.443	24.666	33785	8	7.345	5.600
33508	24	2.110	6.064	33580	8	23.223	12.369	33652	16	15.088	18.076	33724	10	12.848	24.303	33786	12	8.614	5.700
33509	12	9.336	6.038	33581	13	0.340	13.870	33653	8	17.680	18.682	33725	12	13.306	24.232	33787	8	14.957	5.952
33510	15	10.176	6.486	33582	8	4.600	13.160	33654	12	4.212	19.615	33726	19	13.628	24.212	33788*	42	16.143	5.320
33511	24	14.875	6.761	33583	12	7.877	13.618	33655	22	7.156	19.592	33727	17	13.650	24.311	33789	31	18.970	5.740
33512	19	15.421	6.292	33584	8	13.514	13.166	33656	21	9.504	19.134	33728	24	14.648	24.324	33790	35	20.244	5.386
33513	13	18.057	6.542	33585	10	14.166	13.594	33657	13	11.656	19.561	33729	35	16.045	24.578	33791	20	7.614	6.712
33514	10	22.418	6.630	33586	10	14.616	13.220	33658	14	12.308	19.200	33730	11	20.614	24.530	33792	24	11.494	6.627
33515	34	25.657	6.812	33587	10	14.890	13.386	33659	15	15.426	19.802	33731	27	24.820	24.117	33793	10	11.556	6.424
33516	12	2.039	7.658	33588	16	16.784	13.600	33660	12	16.320	19.390	33732	21	25.186	24.370	33794	12	17.050	6.999
33517	24	3.144	7.694	33589	20	19.352	13.228	33661	12	18.793	19.143	33733	23	3.874	25.184	33795	40	18.182	6.367
33518	13	3.718	7.840	33590	20	23.076	13.034	33662	19	21.560	19.160	33734	12	5.294	25.010	33796*	49	19.864	6.356
33519	15	6.290	7.818	33591	15	23.091	13.544	33663	14	21.917	19.326	33735	41	17.950	25.158	33797	14	22.194	6.961
33520	16	12.015	7.479	33592	11	23.156	13.181	33664	10	23.406	19.327	33736	10	19.244	25.367	33798	13	1.308	7.594
33521	13	14.118	7.462	33593	12	0.797	14.968	33665	9	23.684	19.636	33737	15	19.670	25.706	33799	41	3.346	7.076
33522	10	15.280	7.872	33594	13	3.109	14.250	33666	14	24.160	19.200	33738	19	21.559	25.420	33800	30	8.644	7.600
33523*	28	17.480	7.380	33595	10	5.356	14.916	33667	21	24.785	19.066					33801	8	15.116	7.458
33524	26	20.982	7.752	33596	24	12.214	14.298	33668	11	0.560	20.900					33802	10	23.534	7.950
33525	14	23.610	7.297	33597	14	12.670	14.455	33669	11	1.054	20.972					33803	36	1.062	8.624
33526	9	1.671	8.522	33598*	46	14.622	14.692	33670	14	4.393	20.150					33804	11	3.080	8.308
33527	10	2.428	8.724	33599	11	14.850	14.764	33671	14	8.900	20.665					33805	8	4.962	8.957
33528	11	8.544	8.790	33600	17	16.864	14.750	33672*	48	9.062	20.562					33806	20	14.418	8.495
33529	18	10.120	8.378	33601	11	17.759	14.411	33673*	33	10.477	20.564					33807	33	20.611	8.280
33530	12	12.860	8.718	33602	8	19.189	14.128	33674	19	12.940	20.984					33808*	80	23.578	8.620
33531	13	15.522	8.275	33603	10	19.968	14.364	33675	15	15.750	20.879					33809	31	4.890	9.750
33532	13	15.626	8.184	33604	8	20.416	14.636	33676	10	16.170	20.347					33810	40	8.633	9.860
33533	31	19.998	8.484	33605	13	22.017	14.618	33677	18	18.300	20.524					33811	9	13.884	9.272
33534	27	23.347	8.322	33606	14	22.116	14.630	33678	14	22.688	20.714					33812	9	14.892	9.336
33535	12	23.638	8.451	33607*	43	0.550	15.254	33679	9	23.143	20.635					33813	10	15.136	9.426
33536	10	23.941	8.730	33608	11	2.861	15.289	33680	10	25.577	20.464					33814	26	16.557	9.996
33537	12	25.370	8.040	33609	18	9.757	15.514	33681	14	0.502	21.294					33815	32	19.064	9.343
33538	11	2.844	9.042	33610	13	9.829	15.170	33682	11	3.344	21.985					33816	30	21.948	9.929
33539	21	2.911	9.692	33611	10	13.725	15.868	33683	24	3.846	21.696					33817	21	22.845	9.656
33540	12	2.980	9.606	33612	8	14.349	15.800	33684*	37	6.662	21.973					33818	14	25.676	9.146
33541	16	6.971	9.460	33613	12	16.192	15.108	33685	10	8.									



33827	8	23.258	10.656	33899	35	21.340	18.295	<div>R.A. 10<sup>h</sup> 12<sup>m</sup></div> <div>Plate 984; 1917 Feb. 16.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>--02583 +.00542 +.1392</div> <div>D E F</div> <div>--00595 --.02574 --.0771</div> <div>Mag.=16.0--1.09√d</div>	34056	14	19.036	4.802	34128	12	1.372	10.954
33828	10	23.469	10.971	33900	36	21.788	18.210		34057	26	19.924	4.689	34129	9	2.140	10.290
33829	17	25.434	10.104	33901	36	22.358	18.732		34058*	37	20.072	4.110	34130	22	3.325	10.063
33830*	46	0.914	11.920	33902	42	25.300	18.076		34059	30	23.468	4.323	34131	11	5.590	10.410
33831	16	16.152	11.962	33903	15	2.064	19.486		34060	8	25.535	4.751	34132	14	5.674	10.274
33832	8	17.036	11.572	33904	23	2.686	19.340		34061	8	25.918	4.140	34133	28	6.300	10.480
33833*	33	19.198	11.214	33905	20	5.952	19.888		34062	28	5.710	5.866	34134	9	10.160	10.558
33834	38	19.248	11.240	33906	22	6.942	19.866		34063	8	8.036	5.518	34135	29	10.480	10.712
33835*	41	23.412	11.006	33907	30	7.492	19.345		34064	9	8.776	5.764	34136*	69	12.232	10.300
33836*	42	0.572	12.267	33908	35	9.076	19.290		34065*	42	9.476	5.962	34137	31	12.974	10.566
33837	9	5.424	12.076	33909	31	11.822	19.040	34066	23	11.624	5.950	34138	12	14.100	10.254	
33838	36	6.801	12.036	33910	15	12.390	19.666	34067	28	13.956	5.048	34139	8	14.526	10.560	
33839	13	6.976	12.460	33911	13	12.726	19.464	34068	10	14.078	5.100	34140	17	15.169	10.795	
33840	36	18.390	12.567	33912	9	14.047	19.654	34069	8	14.823	5.281	34141	12	18.915	10.920	
33841	21	21.518	12.790	33913	24	14.164	19.615	34070	12	16.148	5.335	34142	8	20.794	10.922	
33842	15	22.792	12.745	33914	10	15.887	19.512	34071	10	18.804	5.158	34143	12	4.270	11.074	
33843	16	24.388	12.560	33915	12	17.162	19.803	34072	8	20.844	5.609	34144	14	5.014	11.188	
33844	31	0.874	13.340	33916	36	24.132	19.914	34073	14	21.996	5.926	34145	8	8.486	11.660	
33845	16	0.895	13.850	33917	33	25.948	19.108	34074	15	0.050	6.954	34146	8	10.940	11.896	
33846	8	0.954	13.484	33918	15	5.386	20.708	34075	8	4.500	6.708	34147	10	14.844	11.920	
33847	8	7.514	13.852	33919	29	6.514	20.725	34076	8	4.630	6.210	34148	19	16.950	11.794	
33848	11	7.737	13.856	33920	17	7.462	20.045	34077	31	5.529	6.659	34149	8	17.566	11.890	
33849	12	8.842	13.745	33921	30	8.834	20.808	34078	12	5.599	6.330	34150	8	19.228	11.824	
33850*	49	11.114	13.564	33922	8	13.433	20.350	34079	15	10.339	6.609	34151	14	19.724	11.460	
33851*	49	22.544	13.326	33923	17	23.272	20.814	34080	10	13.917	6.778	34152	12	19.965	11.472	
33852	32	24.361	13.430	33924	41	25.250	20.471	34081*	36	15.970	6.141	34153	12	25.178	11.008	
33853	9	4.152	14.604	33925	12	2.914	21.610	34082	10	17.666	6.630	34154	8	0.381	12.957	
33854	12	4.478	14.802	33926	40	6.950	21.808	34083	11	17.910	6.608	34155	16	0.712	12.735	
33855	17	6.612	14.166	33927	12	9.690	21.407	34084	12	21.394	6.512	34156	9	1.630	12.114	
33856	35	7.668	14.672	33928	12	11.390	21.648	34085*	46	23.066	6.164	34157	16	2.308	12.530	
33857	9	10.740	14.206	33929*	40	19.596	21.250	34086	10	23.114	6.564	34158	8	2.944	12.974	
33858	38	22.322	14.584	33930	37	20.326	21.665	34087	10	23.224	6.560	34159	8	7.870	12.729	
33859	9	22.816	14.630	33931	19	22.640	21.349	34088	12	1.398	7.928	34160	33	8.187	12.386	
33860	12	23.493	14.548	33932	13	9.409	22.836	34089	13	8.962	7.138	34161	8	8.386	12.574	
33861*	50	24.608	14.922	33933	37	10.904	22.458	34090	17	12.988	7.150	34162	8	9.388	12.354	
33862	18	5.502	15.594	33934*	41	12.796	22.310	34091	12	16.237	7.580	34163	19	10.670	12.740	
33863	8	6.910	15.880	33935	38	16.804	22.650	34092	12	16.301	7.318	34164	13	11.605	12.170	
33864	36	7.134	15.820	33936	14	21.990	22.396	34093	10	18.400	7.387	34165*	36	14.894	12.442	
33865*	64	9.064	15.275	33937	9	22.505	22.787	34094	12	21.148	7.176	34166	11	18.710	12.490	
33866*	60	11.815	15.696	33938	8	25.843	22.290	34095*	54	23.904	7.220	34167	13	20.629	12.695	
33867	16	11.986	15.640	33939	18	0.081	23.175	34096*	65	1.446	8.602	34168	9	21.696	12.730	
33868	17	16.624	15.046	33940	12	2.074	23.254	34097	8	2.907	8.615	34169	11	24.618	12.872	
33869	8	18.846	15.722	33941	18	3.588	23.280	34098*	37	4.444	8.839	34170*	44	0.468	13.319	
33870	8	22.571	15.469	33942	23	3.972	23.640	34099	9	5.176	8.134	34171	25	2.288	13.400	
33871	40	23.094	15.174	33943	8	7.596	23.926	34100	28	5.476	8.056	34172	8	2.346	13.404	
33872	24	23.944	15.817	33944	11	7.904	23.942	34101	12	8.568	8.666	34173	10	2.410	13.953	
33873	18	24.012	15.856	33945	15	9.958	23.632	34102	9	9.034	8.132	34174	24	11.044	13.509	
33874	37	0.783	16.674	33946	31	10.036	23.914	34103	13	10.524	8.679	34175	8	12.448	13.256	
33875*	37	5.318	16.197	33947	18	11.890	23.562	34104	12	11.416	8.758	34176	8	17.233	13.844	
33876	8	5.417	16.326	33948	20	12.510	23.098	34105	9	11.673	8.916	34177	10	17.950	13.758	
33877*	41	8.063	16.400	33949	8	23.359	23.374	34106	10	13.310	8.620	34178	14	22.486	13.120	
33878	12	16.750	16.166	33950	13	23.600	23.880	34107	13	19.475	8.878	34179	10	22.531	13.251	
33879	13	19.518	16.111	33951	12	24.698	23.396	34108	17	21.466	8.418	34180	14	24.882	13.208	
33880	28	20.019	16.325	33952	31	2.812	24.394	34109	8	21.774	8.593	34181	30	0.264	14.581	
33881	18	21.662	16.050	33953	30	3.182	24.640	34110	8	22.582	8.330	34182	11	0.756	14.620	
33882*	40	21.726	16.734	33954	8	4.518	24.104	34111	33	22.700	8.354	34183	10	1.435	14.528	
33883*	44	23.160	16.500	33955	34	6.684	24.866	34112	10	0.200	9.830	34184*	46	2.549	14.888	
33884	15	2.406	17.192	33956	14	6.792	24.726	34113	22	0.730	9.647	34185	27	7.262	14.844	
33885	11	2.516	17.022	33957	22	9.442	24.066	34114	18	3.556	9.100	34186	10	7.648	14.254	
33886	15	3.292	17.580	33958*	42	11.240	24.796	34115	30	5.251	9.314	34187	13	7.734	14.756	
33887	12	4.134	17.050	33959	22	11.570	24.245	34116	24	7.514	9.552	34188*	33	11.500	14.1	



34200	8	9.602	15.482	34272	12	3.874	22.245	<b>R.A. 10<sup>h</sup> 20<sup>m</sup></b> <b>Plate 985 ; 1917 Feb. 16.</b> <i>Provisional Constants.</i> <b>A      B      C</b> <b>-02576 +00534 +2083</b> <b>D      E      F</b> <b>-00558 -02579 +0184</b> <i>Mag. = 15.6 - 1.09√d</i>	34406	9	15.467	5.111	34478	24	19.520	12.425
34201	8	10.382	15.895	34273	11	4.172	22.329		34407	12	16.620	5.606	34479	8	19.615	12.894
34202	10	14.236	15.574	34274	8	4.357	22.234		34408	10	23.112	5.800	34480	8	21.647	12.602
34203	8	14.362	15.086	34275	11	11.752	22.006		34409*	40	0.942	6.395	34481*	53	23.456	12.746
34204	10	17.008	15.692	34276	8	12.632	22.733		34410	8	0.997	6.792	34482	8	25.902	12.199
34205	10	17.115	15.970	34277	21	14.303	22.219		34411	8	1.104	6.788	34483	12	0.444	13.354
34206	10	19.704	15.622	34278	10	14.734	22.690		34412	20	4.841	6.246	34484	10	0.490	13.486
34207	8	20.560	15.762	34279	8	14.800	22.367		34413	15	5.212	6.702	34485	10	2.571	13.083
34208	9	22.392	15.070	34280	14	17.988	22.914		34414	12	6.965	6.630	34486	15	2.840	13.416
34209*	39	1.120	16.487	34281	8	19.148	22.070		34415	14	7.135	6.250	34487	16	4.066	13.808
34210	14	1.840	16.400	34282	22	20.600	22.980	<b>No.      d      x      y</b>	34416	23	10.390	6.316	34488	8	4.154	13.940
34211	8	2.608	16.534	34283	27	22.298	22.078		34417	20	11.469	6.280	34489	12	5.187	13.482
34212	11	9.850	16.627	34284	8	23.674	22.180		34418	9	11.714	6.924	34490	14	5.194	13.772
34213*	35	9.852	16.565	34285	10	1.407	23.352		34419	13	22.215	6.860	34491	21	5.441	13.672
34214	15	9.862	16.526	34286	17	1.650	23.860		34420	8	22.240	6.906	34492	12	6.244	13.571
34215	10	10.978	16.466	34287	8	2.274	23.890		34421	10	23.708	6.280	34493	8	6.274	13.580
34216	14	11.700	16.354	34288	22	2.742	23.358		34422	11	23.846	6.822	34494	10	9.610	13.077
34217	9	13.208	16.494	34289	13	4.945	23.804		34423*	54	1.786	7.441	34495	11	13.360	13.174
34218	22	14.972	16.160	34290	11	6.258	23.779		34424	10	3.957	7.862	34496	9	13.460	13.866
34219	27	18.036	16.594	34291	12	7.898	23.180		34425	11	7.280	7.802	34497	15	13.930	13.548
34220	16	25.094	16.463	34292	9	8.287	23.424	<b>No.      d      x      y</b>	34426	11	11.046	7.782	34498	8	14.621	13.756
34221	28	4.943	17.398	34293	10	8.424	23.029		34427*	40	12.382	7.770	34499*	64	15.169	13.681
34222	30	9.354	17.197	34294	27	9.500	23.107		34428	8	13.554	7.152	34500	10	16.355	13.366
34223	35	9.535	17.362	34295	9	13.218	23.503		34429	23	14.131	7.090	34501	8	19.078	13.462
34224	14	14.430	17.859	34296	13	13.304	23.156		34430	22	14.490	7.760	34502	9	20.528	13.329
34225	19	15.830	17.628	34297	20	13.718	23.076		34431	10	15.400	7.480	34503	20	22.402	13.934
34226	25	19.233	17.882	34298	13	13.848	23.296		34432*	35	21.070	7.552	34504	11	22.412	13.410
34227	12	19.740	17.789	34299*	33	15.678	23.744		34433*	40	21.424	7.276	34505	8	24.478	13.130
34228	17	24.006	17.692	34300	13	16.361	23.892		34434	22	22.950	7.394	34506	14	25.424	13.500
34229	28	0.348	18.726	34301	9	16.684	23.813		34435	11	23.778	7.786	34507	8	2.157	14.074
34230*	37	3.278	18.034	34302	9	16.858	23.714		34436	32	0.601	8.588	34508	8	5.134	14.156
34231	12	9.188	18.798	34303	26	18.224	23.442	<b>No.      d      x      y</b>	34437	9	8.488	8.429	34509	14	11.583	14.146
34232	23	10.218	18.332	34304	31	19.512	23.102		34438	15	17.083	8.715	34510	12	12.432	14.017
34233	29	10.816	18.468	34305	9	22.384	23.826		34439	14	19.104	8.304	34511	8	0.351	15.749
34234	12	10.896	18.072	34306	12	25.352	23.547		34440	35	21.656	8.828	34512	8	0.368	15.306
34235	13	13.772	18.144	34307	13	25.744	23.433		34441	10	6.458	9.754	34513	12	5.584	15.663
34236	8	19.220	18.895	34308	14	0.265	24.222		34442*	22	7.884	9.803	34514	18	6.222	15.490
34237*	36	20.220	18.512	34309	10	5.296	24.664		34443	10	8.986	9.355	34515*	28	8.496	15.266
34238	33	22.215	18.205	34310	16	6.492	24.276		34444	21	11.764	9.554	34516	14	9.668	15.190
34239	27	25.050	18.199	34311	16	7.144	24.576		34445	20	15.558	9.775	34517	14	10.585	15.085
34240	8	25.586	18.658	34312	9	12.485	24.034		34446*	28	20.946	9.468	34518*	25	11.141	15.846
34241	28	2.134	19.886	34313	23	12.494	24.029	<b>No.      d      x      y</b>	34447	20	21.040	9.572	34519	13	12.286	15.491
34242	30	3.942	19.058	34314	12	12.998	24.323		34448	17	8.860	10.415	34520	13	13.646	15.720
34243	10	6.964	19.392	34315*	39	13.155	24.160		34449	10	10.926	10.978	34521*	31	16.404	15.919
34244	8	10.223	19.152	34316*	31	17.418	24.120		34450	12	17.080	10.065	34522	21	17.634	15.093
34245	28	10.729	19.745	34317*	38	20.380	24.228		34451	20	18.329	10.152	34523	9	17.924	15.900
34246	12	13.502	19.622	34318	13	21.913	24.060		34452	8	18.800	10.106	34524	13	19.922	15.430
34247	8	20.942	19.550	34319	14	25.040	24.312		34453	14	26.902	10.265	34525	10	20.578	15.240
34248	12	22.948	19.248	34320	11	16.572	25.523		34454	11	22.176	10.059	34526	15	21.045	15.241
34249	10	24.473	19.660	34321	8	20.112	25.385		34455	13	23.615	10.693	34527	21	21.250	15.300
34250	15	1.286	20.799	34322	8	23.701	25.196		34456	30	25.576	10.342	34528	10	23.202	15.222
34251	8	2.618	20.846					<b>No.      d      x      y</b>	34457	12	3.112	11.216	34529	20	23.216	15.059
34252	34	3.257	20.430						34458	32	4.906	11.944	34530	13	25.388	15.198
34253	22	6.232	20.019						34459	18	5.136	11.913	34531	13	25.704	15.738
34254	27	7.207	20.764						34460	11	6.824	11.367	34532	15	3.090	16.670
34255	9	9.826	20.560						34461*	35	7.340	11.816	34533	9	5.142	16.800
34256	29	18.198	20.030						34462	15	7.645	11.102	34534*	86	5.878	16.910
34257	8	20.934	20.032						34463	12	9.119	11.442	34535	9	10.285	16.607
34258	8	23.413	20.598						34464	20	9.784	11.276	34536	14	14.023	16.173
34259	8	24.311	20.348						34465	18	9.800	11.374	34537*	40	14.262	16.064
34260	18	0.660	21.339						34466*	22	11.266	11.596	34538	10	15.428	16.540
34261	22	5.855	21.557					<b>No.      d      x      y</b>	34467	20	11.685	11.788	34539	12	16.686	16.832
34262	9	6.476	21.084						34468	11	11.960	11.411	34540	16	21.214	16.936
34263	8	7.600	21.595						34469	9	15.058	11.650	34541	15	24.616	16.710
34264	15	11.256	21.851						34470	11	15.648	11.821	34542	20	25.734	16.189
34265	29	13.450	21.602						34471	12	20.764	11.838	34543	20	2.016	17.912
34266	12	15.788	21.200						34472	17	24.348	11.820	34544	19	4.506	17.564
34267	22	18.850	21.810						34473	17	24.370	11.856	34545	12	7.036	17.236
34268*	40	19.059	21.974						34474	18	25.063	11.029	34546*	26	10.085	17.480
34269	10	21.100	21.828						34475	26	25.635	11.473	34547	20	10.246	17.016
34270	11	0.020	22.392						34476	21	5.804	12.224	34548	10	10.790	17.550
34271	10	0.544	22.778						34477	10	9.586	12.940	34549	12	13.900	17.890



34550	10	15.326	17.384	34622	25	20.944	24.312	34689	13	6.904	5.960	34761	10	19.590	12.574	34833*	33	13.162	18.678
34551	21	16.446	17.658	34623	10	22.316	24.398	34690	34	7.890	5.725	34762	10	23.668	12.415	34834	11	17.065	18.804
34552	24	0.225	18.444	34624	8	23.072	24.056	34691*	38	7.902	5.846	34763	32	25.192	12.566	34835	8	19.150	18.405
34553	20	3.060	18.403	34625	12	25.058	24.562	34692	28	12.631	5.966	34764	31	0.270	13.930	34836	12	2.520	19.479
34554	8	3.606	18.861	34626	10	4.531	25.698	34693	10	14.244	5.712	34765	9	0.276	13.408	34837	9	3.452	19.992
34555	9	5.034	18.080	34627*	58	5.462	25.214	34694	20	15.182	5.308	34766	8	2.338	13.094	34838	31	4.307	19.912
34556	12	6.287	18.696	34628	27	6.253	25.078	34695	10	16.513	5.032	34767	25	3.289	13.453	34839*	48	7.370	19.414
34557	18	9.997	18.344	34629	38	13.715	25.486	34696	12	20.476	5.833	34768	9	4.818	13.580	34840	12	11.143	19.373
34558*	29	12.016	18.099	34630	11	19.397	25.552	34697	10	1.473	6.259	34769	12	7.060	13.454	34841	14	14.162	19.460
34559	11	12.082	18.427	34631	10	19.824	25.062	34698	10	1.618	6.798	34770	9	8.983	13.629	34842	19	18.062	19.499
34560	25	16.016	18.214					34699	9	4.695	6.820	34771	11	11.996	13.374	34843	20	18.465	19.299
34561	17	16.291	18.698					34700	9	4.742	6.508	34772	21	13.766	13.262	34844	8	2.362	20.082
34562	9	16.838	18.478					34701	15	9.716	6.448	34773	9	14.062	13.401	34845	12	4.508	20.796
34563	10	18.487	18.404					34702	26	13.216	6.281	34774	8	14.066	13.097	34846	8	4.856	20.543
34564	18	18.764	18.754					34703	35	18.550	6.750	34775	25	15.600	13.559	34847	8	9.246	20.940
34565	12	19.154	18.836					34704	28	18.716	6.566	34776	11	18.176	13.708	34848	12	9.333	20.175
34566	10	19.338	18.874					34705	35	19.648	6.404	34777	22	18.578	13.976	34849	26	9.560	20.280
34567	10	21.682	18.271					34706	38	21.936	6.289	34778	10	19.640	13.419	34850	8	10.741	20.442
34568	12	21.890	18.519					34707*	42	24.888	6.045	34779	37	21.288	13.402	34851	11	10.892	20.828
34569	20	22.404	18.844					34708	33	0.729	7.382	34780	11	21.870	13.774	34852	10	13.618	20.650
34570	10	23.399	18.765					34709	15	1.562	7.762	34781	11	3.818	14.740	34853	18	14.893	20.572
34571	10	25.366	18.983					34710	24	3.824	7.596	34782	9	4.002	14.062	34854*	52	14.899	20.217
34572	11	0.976	19.477					34711	28	6.462	7.030	34783	10	4.824	14.431	34855	20	20.807	20.188
34573	10	2.504	19.874					34712	11	8.706	7.528	34784	14	6.455	14.500	34856	26	0.040	21.554
34574	19	6.611	19.370					34713	37	9.678	7.488	34785	17	6.483	14.153	34857	8	2.455	21.202
34575	8	6.707	19.931					34714	20	11.370	7.440	34786	9	10.880	14.702	34858	16	5.462	21.060
34576	12	9.938	19.538					34715*	47	11.626	7.038	34787*	38	11.122	14.079	34859	14	6.219	21.150
34577	8	12.619	19.860					34716	14	19.570	7.780	34788	12	12.042	14.781	34860*	37	6.926	21.982
34578	20	19.079	19.980					34717	8	22.652	7.057	34789	10	14.622	14.606	34861	16	7.893	21.338
34579	10	22.394	19.222					34718	8	22.776	7.797	34790	33	21.082	14.130	34862	23	14.836	21.077
34580	10	24.570	19.514					34719	8	24.982	7.080	34791	32	21.370	14.652	34863	11	17.832	21.660
34581	9	1.454	20.824					34720	11	5.286	8.922	34792	11	1.092	15.204	34864	10	20.251	21.900
34582	8	10.563	20.870					34721	13	9.673	8.208	34793	31	1.100	15.040	34865	30	20.720	21.002
34583	15	11.322	20.744					34722*	43	10.410	8.022	34794	9	2.764	15.246	34866	32	21.377	21.530
34584	10	11.648	20.046					34723*	50	12.602	8.764	34795	22	3.277	15.150	34867	14	4.392	22.572
34585	8	13.774	20.050					34724	34	12.840	8.026	34796	23	3.600	15.688	34868	25	5.873	22.809
34586	20	16.665	20.550					34725	35	15.428	8.849	34797	20	4.396	15.990	34869	25	6.515	22.078
34587	11	20.788	20.536					34726	8	22.989	8.980	34798	13	7.360	15.112	34870	26	8.376	22.940
34588	8	24.404	20.117					34727	10	10.898	9.938	34799	11	7.866	15.066	34871*	39	10.772	22.207
34589	10	7.398	21.178					34728	16	11.689	9.718	34800	12	9.606	15.258	34872	26	10.792	22.198
34590	11	8.790	21.420					34729	17	16.484	9.758	34801	35	10.216	15.800	34873	12	12.802	22.677
34591*	42	9.874	21.200					34730	8	16.871	9.887	34802	27	17.389	15.320	34874	32	14.926	22.696
34592	18	11.956	21.873					34731	31	19.536	9.686	34803*	37	17.621	15.853	34875	11	14.954	22.777
34593	22	17.393	21.358					34732	8	23.433	9.651	34804	33	18.042	15.542	34876	10	19.727	22.771
34594	13	20.388	21.006					34733	23	1.438	10.671	34805	23	23.412	15.407	34877*	41	20.144	22.648
34595	19	22.062	21.554					34734	30	2.892	10.988	34806	26	2.526	16.674	34878	10	20.398	22.218
34596	18	0.356	22.315					34735	38	3.394	10.295	34807	30	3.634	16.137	34879	8	21.785	22.196
34597	9	1.734	22.404					34736	10	6.655	10.242	34808*	42	6.169	16.588	34880	9	22.088	22.118
34598	8	13.980	22.125					34737	9	8.270	10.018	34809*	38	8.630	16.636	34881	13	0.092	23.068
34599*	48	15.925	22.168					34738	8	11.594	10.061	34810	15	9.670	16.818	34882	18	1.089	23.432
34600	24	16.538	22.698					34739	12	13.330	10.760	34811	8	14.442	16.189	34883	11	5.353	23.764
34601	10	16.734	22.527					34740	18	14.853	10.002	34812	33	15.234	16.516	34884	11	5.572	23.422
34602	14	17.804	22.223					34741	10	20.200	10.563	34813	8	16.822	16.341	34885	25	6.580	23.365
34603	22	20.486	22.016					34742	9	20.986	10.500	34814	8	21.842	16.565	34886	32	6.662	23.195
34604	11	21.316	22.548					34743	44	25.968	10.478	34815	10	21.885	16.758	34887	29	8.549	23.690
34605	12	3.432	23.750					34744	9	0.746	11.293	34816*	45	23.930	16.756	34888	34	21.930	23.622
34606	14	3.820	23.631					34745	21	2.189	11.790	34817	18	25.373	16.298	34889	16	23.663	23.776
34607	12	4.126	23.826					34746	24	2.212	11.823	34818	21	4.910	17.080	34890	11	0.334	24.394
34608	10	5.694	23.956					34747*	41	3.470	11.426	34819	9	10.646	17.804	34891	18	3.082	24.522
34609	20	6.356	23.344					34748	8	4.216	11.022	34820	11	12.422	17.692	34892	11	9.720	24.148
34610	19	7.942	23.548					34749	10	6.708	11.557	34821	30	14.846	17.712	34893	33	11.327	24.948
34611	12	11.579	23.202					34750	30	13.589	11.950	34822	36	15.244	17.072	34894	32	13.080	24.150
34612	12	14.778	23.554					34751	31	15.150	11.794	34823	10	17.450	17.134	34895	18	14.884	24.669
34613*	40	18.055	23.649					34752	27	17.753	11.407	34824	27	19.977	17.632	34896	14	22.910	24.930
34614	14	19.603	23.962					34753	10	25.093	11.327	34825	37	21.383	17.796	34897	37	23.488	24.013
34615*	30	20.571	23.062					34754	8	0.770	12.632	34826	9	23.374	17.785	34898	43	5.936	25.214
34616*	29	20.797	23.614					34755*	69	1.308	12.726	34827	26	0.344	18.835	34899	38	9.844	25.686
34617	11	22.090	23.064					34756	10	3.748	12.143	34828	12	1.337	18.742	34900	34	23.606	25.054
34618	17	23.084	23.448					34757	8	12.620	12.114	34829	1						



R.A. 10 <sup>h</sup> 36 <sup>m</sup>					R.A. 10 <sup>h</sup> 44 <sup>m</sup>										
Plate 992; 1917 Feb. 18.					Plate 986; 1917 Feb. 17.										
Provisional Constants.					Provisional Constants.										
A            B            C					A            B            C										
-02554 +00037 +0745					-02565 +00824 +1016										
D            E            F					D            E            F										
-00070 -02576 -2219					-00845 -02564 -2241										
Mag.=16.7-1.09√d					Mag.=16.4-1.09√d										
No.	d	x	y		No.	d	x	y							
34951	13	2.493	0.966	35006	12	2.680	7.178	35078	15	25.784	13.413	35150	27	4.885	20.264
34952	10	3.550	0.999	35007	30	4.242	7.992	35079	9	4.428	14.612	35151	18	9.388	20.474
34953	31	4.526	0.520	35008*	42	7.356	7.820	35080	8	4.688	14.310	35152	23	11.883	20.562
34954	16	9.046	0.460	35009	10	10.380	7.176	35081	27	8.082	14.935	35153	26	13.174	20.896
34955	14	17.496	0.455	35010	18	20.850	7.094	35082	22	8.157	14.298	35154	9	13.940	20.500
34956	53	17.579	0.918	35011*	62	22.418	7.982	35083	15	9.121	14.236	35155	11	16.515	20.840
34957	11	19.334	0.338	35012	15	23.539	7.610	35084	14	9.246	14.308	35156	10	19.509	20.133
34958	16	4.210	1.683	35013	11	4.568	8.313	35085	12	10.248	14.350	35157	24	20.274	20.537
34959	28	7.490	1.460	35014	16	8.516	8.342	35086	14	13.452	14.778	35158	9	21.968	20.554
34960	17	10.414	1.580	35015	10	17.716	8.976	35087	8	18.616	14.919	35159	20	22.325	20.736
34961	19	10.650	1.822	35016	10	22.242	8.526	35088	9	19.504	14.588	35160	10	22.515	20.982
34962*	38	11.810	1.880	35017	11	23.256	8.859	35089	11	19.540	14.760	35161	9	22.644	20.982
34963	22	12.303	1.233	35018	10	0.693	9.087	35090	9	19.816	14.570	35162	11	3.897	21.469
34964	9	16.088	1.928	35019	10	1.140	9.756	35091*	40	25.086	14.447	35163*	47	4.083	21.580
34965	20	17.316	1.450	35020	16	3.900	9.504	35092	21	1.140	15.512	35164	18	8.980	21.743
34966	25	1.820	2.496	35021	10	6.438	9.936	35093	13	3.812	15.126	35165	11	11.389	21.750
34967	30	2.686	2.669	35022	12	7.147	9.920	35094	33	6.150	15.048	35166*	34	13.170	21.525
34968	19	3.669	2.953	35023	10	8.684	9.328	35095	11	7.488	15.000	35167*	34	13.319	21.661
34969	9	4.980	2.873	35024	10	11.972	9.360	35096	17	7.629	15.633	35168	10	16.110	21.790
34970	12	8.417	2.360	35025	20	15.640	9.264	35097	17	10.774	15.784	35169	13	17.054	21.916
34971	10	14.664	2.954	35026	15	18.485	9.524	35098	19	12.986	15.520	35170	25	17.639	21.718
34972	10	18.818	2.677	35027	10	20.984	9.205	35099	13	14.090	15.426	35171	24	19.720	21.706
34973	15	20.560	2.957	35028	12	23.490	9.872	35100	23	19.206	15.252	35172	9	20.124	21.324
34974	14	5.672	3.405	35029*	45	3.678	10.570	35101	13	22.850	15.214	35173	12	24.600	21.575
34975	11	7.670	3.985	35030	25	3.710	10.562	35102	11	23.018	15.163	35174	10	25.830	21.450
34976	21	9.960	3.413	35031	10	9.216	10.839	35103	25	25.002	15.077	35175	12	0.744	22.223
34977*	43	11.028	3.887	35032	10	10.938	10.832	35104*	46	1.662	16.856	35176	15	7.733	22.824
34978*	43	12.426	3.317	35033	20	11.535	10.262	35105	19	3.108	16.393	35177	10	10.040	22.786
34979	20	19.786	3.695	35034	25	15.685	10.600	35106	17	3.832	16.485	35178	23	13.198	22.964
34980	19	21.140	3.758	35035	10	17.204	10.358	35107	10	5.072	16.888	35179	13	16.490	22.248
34981	16	5.368	4.422	35036	30	20.915	10.058	35108	19	6.104	16.455	35180	12	18.130	22.034
34982	17	6.502	4.634	35037	13	2.806	11.425	35109	21	6.962	16.465	35181	11	19.500	22.018
34983	17	7.440	4.002	35038	10	3.378	11.978	35110	12	9.757	16.993	35182	8	25.005	22.586
34984	11	8.552	4.764	35039	12	5.206	11.076	35111	18	9.780	16.290	35183	17	1.426	23.880
34985	18	8.862	4.620	35040	12	6.680	11.604	35112	20	12.617	16.187	35184	11	3.351	23.320
34986	21	17.420	4.457	35041	11	6.897	11.768	35113	10	1.116	17.892	35185	12	8.758	23.651
34987*	50	20.031	4.756	35042	9	8.280	11.436	35114	13	4.702	17.988	35186	16	9.102	23.398
34988	27	21.344	4.728	35043	25	14.054	11.434	35115	24	5.035	17.244	35187	14	9.670	23.860
34989	10	23.325	4.386	35044	10	17.274	11.069	35116	19	5.270	17.820	35188	27	17.575	23.692
34990	21	7.576	5.050	35045	14	22.596	11.693	35117	9	6.758	17.934	35189	8	23.512	23.507
34991	10	11.914	5.820	35046	26	23.440	11.366	35118	10	11.116	17.693	35190	17	25.210	23.826
34992	10	13.775	5.569	35047	12	1.386	12.519	35119	10	11.475	17.532	35191	38	1.252	24.118
34993	9	17.834	5.024	35048	13	2.744	12.056	35120	12	11.960	17.700	35192	8	4.125	24.358
34994	20	22.167	5.575	35049	27	2.910	12.660	35121	14	14.688	17.123	35193	12	5.492	24.328
34995	13	22.624	5.720	35050	9	5.837	12.626	35122	10	14.770	17.346	35194	15	6.428	24.234
34996*	44	2.580	6.140	35051	10	6.725	12.426	35123	14	15.685	17.844	35195*	56	7.094	24.824
34997	10	10.736	6.826	35052	16	6.774	12.156	35124	15	20.266	17.512	35196	12	7.178	24.120
34998	9	12.754	6.033	35053	14	7.760	12.380	35125	15	20.404	17.548	35197	12	7.184	24.705
34999	26	12.944	6.770	35054	12	12.686	12.314	35126	11	21.420	17.330	35198*	39	8.638	24.842
35000	11	14.380	6.094	35055	11	12.837	12.841	35127	18	21.640	17.298	35199	11	10.400	24.836
35001	11	20.262	6.840	35056	10	14.520	12.690	35128	9	1.444	18.312	35200	39	12.215	24.640
35002	24	20.898	6.926	35057	25	16.650	12.700	35129	9	1.720	18.560	35201	16	14.791	24.694
35003	12	23.825	6.354	35058	16	17.358	12.520	35130	10	12.152	18.701	35202	13	18.574	24.398
35004	10	0.350	7.161	35059	14	17.514	12.610	35131	11	15.076	18.698	35203	12	24.339	24.535
35005	11	0.476	7.902	35060	10	18.266	12.324	35132	9	16.710	18.632	35204	20	24.354	24.334
				35061	8	20.243	12.240	35133	10	18.574	18.401	35205	15	0.679	25.036
				35062	11	20.438	12.444	35134	12	19.360	18.136	35206	34	1.377	25.159
				35063	11	22.215	12.003	35135	13	21.114	18.113	35207	10	1.517	25.912
				35064	12	22.456	12.384	35136	35	22.050	18.854	35208	10	6.956	25.400
				35065	11	0.970	13.170	35137	24	4.740	19.239	35209	27	11.508	25.422
				35066	26	3.938	13.859	35138	10	6.608	19.387	35210	12	15.488	25.704
				35067	10	5.980	13.818	35139	10	8.287	19.426	35211	10	15.754	25.990
				35068*	28										



35306*	49	11.415	8.872	35378*	44	18.062	18.226	<div>R.A. 10<sup>h</sup> 52<sup>m</sup></div> <div>Plate 988 ; 1917 Feb. 17.</div> <div>Provisional Constants.</div> <div>A            B            C</div> <div>—02569 +00587 +0648</div> <div>D            E            F</div> <div>—00569 —02584 —0651</div> <div>Mag.=16.0—1.09√d</div>	35506	8	9.798	8.677	35578	15	17.284	15.296
35307	8	16.343	8.340	35379	22	24.424	18.318		35507*	34	14.884	8.570	35579	34	23.127	15.860
35308	8	25.771	8.798	35380	40	24.806	18.616		35508	8	16.014	8.382	35580	36	25.322	15.734
35309	9	1.442	9.874	35381	8	25.263	18.016		35509	21	16.286	8.495	35581	12	3.186	16.114
35310	12	4.296	9.789	35382	8	1.348	19.800		35510	9	17.667	8.831	35582	19	5.580	16.016
35311	8	6.656	9.226	35383	35	5.052	19.897		35511	11	18.905	8.281	35583	13	10.004	16.094
35312	12	8.536	9.413	35384	8	7.860	19.736		35512	10	19.970	8.625	35584	9	13.140	16.782
35313	8	9.292	9.431	35385	12	9.223	19.639		35513	12	22.750	8.630	35585	9	14.764	16.899
35314	34	15.954	9.520	35386	38	20.948	19.642		35514	18	23.802	8.812	35586	8	15.879	16.328
35315	37	8.764	10.966	35387	44	25.388	19.688		35515	9	3.554	9.122	35587	10	17.286	16.610
35316	11	16.665	10.736	35388	10	25.422	19.716	35516	27	21.426	9.814	35588	9	18.156	16.421	
35317	13	18.218	10.175	35389	130	25.616	19.326	35517	13	0.880	10.570	35589	10	25.080	16.994	
35318	10	20.056	10.276	35390	20	0.482	20.762	35518*	36	0.959	10.740	35590	13	4.024	17.522	
35319	8	21.284	10.178	35391	14	6.116	20.994	35519	12	4.249	10.662	35591	8	6.066	17.877	
35320	15	23.086	10.223	35392	34	6.926	20.840	35520	21	6.716	10.904	35592	10	6.724	17.312	
35321*	42	23.164	10.392	35393	17	11.905	20.246	35521*	37	7.236	10.140	35593	20	10.001	17.710	
35322	9	0.580	11.716	35394*	39	17.222	20.080	35522	20	7.744	10.508	35594*	33	11.344	17.246	
35323	35	1.416	11.370	35395	8	21.508	20.046	35523	13	8.200	10.294	35595	8	14.783	17.025	
35324	18	6.438	11.368	35396	46	25.866	20.551	35524*	23	9.568	10.462	35596*	32	16.244	17.876	
35325	19	19.312	11.308	35397	8	2.775	21.556	35525	8	11.485	10.038	35597	17	17.662	17.281	
35326	8	0.208	12.033	35398*	55	10.293	21.878	35526*	36	16.539	10.525	35598	10	20.304	17.114	
35327	8	0.454	12.410	35399*	24	14.084	21.572	35527	10	17.034	10.571	35599	33	22.572	17.866	
35328	9	12.897	12.126	35400	9	14.844	21.078	35528	11	18.328	10.838	35600	30	25.038	17.428	
35329	39	14.050	12.950	35401	29	15.156	21.340	35529*	53	23.137	10.250	35601	36	25.976	17.020	
35330	40	14.054	12.237	35402	8	16.551	21.434	35530	16	23.426	10.417	35602	10	2.224	18.838	
35331	14	21.953	12.127	35403	12	17.766	21.946	35531	33	24.132	10.262	35603	23	2.292	18.654	
35332*	44	23.964	12.646	35404	10	19.300	21.678	35532*	33	4.064	11.433	35604	34	2.676	18.948	
35333	9	1.388	13.712	35405	8	22.133	21.854	35533	8	5.067	11.090	35605	10	3.130	18.344	
35334	14	3.800	13.373	35406	14	4.772	22.797	35534	9	6.400	11.228	35606	8	5.014	18.163	
35335*	44	4.734	13.886	35407	9	4.967	22.942	35535	17	9.716	11.546	35607	8	7.496	18.419	
35336	20	4.888	13.054	35408	20	9.644	22.354	35536	28	10.654	11.744	35608	21	13.079	18.234	
35337	10	9.992	13.126	35409*	40	13.234	22.664	35537*	45	19.332	11.860	35609	32	14.503	18.174	
35338	20	11.855	13.982	35410	13	20.196	22.192	35538	23	21.968	11.732	35610	12	16.810	18.446	
35339*	40	12.484	13.440	35411	19	3.428	23.796	35539*	43	1.778	12.988	35611*	40	18.285	18.570	
35340	11	15.126	13.178	35412	10	16.012	23.981	35540	25	6.660	12.214	35612*	42	21.786	18.508	
35341	11	15.192	13.934	35413	10	17.317	23.911	35541	11	10.500	12.018	35613*	87	3.481	19.649	
35342	11	20.252	13.964	35414	13	20.408	23.960	35542*	38	10.896	12.404	35614	32	5.450	19.770	
35343	24	24.786	13.838	35415	9	2.570	24.523	35543	9	14.458	12.064	35615	8	6.848	19.124	
35344*	41	3.120	14.422	35416	17	2.582	24.320	35544	22	17.957	12.388	35616	8	7.192	19.828	
35345	43	4.588	14.572	35417	12	5.516	24.385	35545	31	18.810	12.340	35617	8	7.894	19.287	
35346*	42	6.877	14.689	35418	15	13.200	24.324	35546	10	21.130	12.534	35618*	33	13.134	19.944	
35347	8	14.916	14.924	35419	8	17.098	24.042	35547	16	21.744	12.272	35619	15	13.414	19.968	
35348	10	17.336	14.406	35420	8	17.796	24.614	35548	9	24.485	12.574	35620	31	13.444	19.788	
35349	34	19.108	14.264	35421	28	19.735	24.044	35549	30	24.874	12.620	35621	32	13.722	19.810	
35350	12	0.902	15.232	35422	12	1.538	25.868	35550	8	25.047	12.001	35622	13	14.558	19.590	
35351	8	1.070	15.176	35423	33	4.294	25.121	35551	8	5.556	13.763	35623	31	15.738	19.917	
35352	33	3.050	15.052	35424	32	11.455	25.544	35552	9	6.964	13.353	35624	14	22.624	19.030	
35353	9	5.728	15.186	35425	31	11.524	25.674	35553	15	12.426	13.769	35625	8	23.526	19.182	
35354*	59	6.318	15.156	35426	15	16.326	25.233	35554	10	14.802	13.106	35626	8	24.782	19.144	
35355	28	11.774	15.566	35427	13	18.534	25.860	35555	24	17.100	13.040	35627*	32	24.900	19.550	
35356	13	12.250	15.325	35428	34	18.680	25.010	35556*	54	18.436	13.304	35628	9	25.975	19.003	
35357	9	17.511	15.750	35429	80	24.562	25.046	35557	27	18.542	13.914	35629*	38	3.268	20.014	
35358	17	20.602	15.414					35558	31	22.090	13.340	35630	16	3.302	20.044	
35359	40	22.296	15.398					35559	15	22.388	13.999	35631*	39	3.750	20.872	
35360	10	25.340	15.785					35560	10	24.942	13.358	35632	33	4.250	20.960	
35361*	42	5.106	16.354					35561	23	2.615	14.170	35633*	51	6.220	20.794	
35362	10	6.576	16.952					35562	8	4.019	14.354	35634	17	7.714	20.687	
35363	8	6.708	16.020					35563	16	5.986	14.371	35635	8	7.798	21.317	
35364*	41	7.627	16.534					35564	10	7.946	14.830	35636*	35	11.446	21.119	
35365	18	9.621	16.310					35565	13	9.382	14.311	35637	11	12.123	21.793	
35366	10	12.475	16.853					35566	13	12.900	14.790	35638	11	14.567	21.550	
35367	34	14.578	16.917					35567	10	13.369	14.594	35639	19	16.		



35650	11	13.126	22.698	35719	20	14.786	3.593	35791	20	15.544	9.666	35863	13	11.731	16.172	35935	20	19.351	24.341
35651	8	16.442	22.376	35720	20	16.390	3.608	35792	11	16.184	9.998	35864	17	15.186	16.240	35936	13	24.782	24.174
35652	8	17.750	22.116	35721	33	16.624	3.295	35793	20	19.858	9.523	35865	9	15.300	16.470	35937	42	8.510	25.504
35653	26	18.364	22.651	35722*	40	17.099	3.744	35794	10	24.123	9.721	35866	13	15.954	16.026	35938	10	15.719	25.468
35654	8	21.432	22.394	35723	20	20.172	3.941	35795	16	25.484	9.576	35867*	37	17.064	16.735	35939	13	16.014	25.379
35655	11	1.419	23.470	35724	17	3.162	4.268	35796*	60	0.996	10.237	35868	20	19.034	16.518	35940	27	16.340	25.024
35656	29	6.548	23.500	35725	22	7.969	4.755	35797	14	1.292	10.404	35869	20	21.440	16.627	35941	11	16.752	25.950
35657	18	7.280	23.476	35726	17	10.284	4.360	35798	29	1.998	10.244	35870	14	24.349	16.012	35942	56	17.460	25.996
35658	8	7.640	23.556	35727	12	15.850	4.213	35799	12	6.082	10.250	35871	34	0.487	17.855	35943	10	23.635	25.406
35659	10	8.458	23.250	35728	23	16.044	4.556	35800	15	6.656	10.460	35872	26	2.950	17.404				
35660	8	9.298	23.392	35729*	25	18.036	4.624	35801	13	9.578	10.159	35873	9	9.910	17.538				
35661	14	16.591	23.380	35730	14	18.820	4.690	35802	19	9.696	10.252	35874	11	15.388	17.154				
35662	12	21.080	23.228	35731	15	19.270	4.572	35803	17	14.294	10.498	35875	10	16.385	17.286				
35663	22	5.110	24.680	35732	11	21.254	4.201	35804	10	16.084	10.880	35876	22	16.516	17.003				
35664	25	5.796	24.800	35733	11	23.386	4.343	35805	24	18.564	10.980	35877	10	16.705	17.906				
35665	23	14.454	24.505	35734*	35	24.536	4.448	35806	9	21.791	10.906	35878	10	17.418	17.510				
35666	34	18.117	24.360	35735	8	1.496	5.224	35807	12	25.100	10.147	35879	9	18.386	17.714				
35667	8	20.654	24.019	35736	12	4.236	5.458	35808	8	25.782	10.834	35880	11	24.360	17.868				
35668	17	20.685	24.291	35737	20	5.748	5.120	35809	15	2.927	11.979	35881	15	3.900	18.976				
35669	13	21.210	24.230	35738	14	10.352	5.084	35810	29	4.946	11.349	35882*	52	4.078	18.573				
35670	14	21.710	24.149	35739	19	10.569	5.214	35811	26	5.638	11.765	35883	20	16.721	18.896				
35671	66	2.483	25.381	35740	15	11.470	5.200	35812	20	9.645	11.320	35884	8	17.449	18.966				
35672	11	5.948	25.530	35741	11	13.781	5.430	35813	10	14.386	11.175	35885	32	18.760	18.262				
35673	68	8.249	25.814	35742	8	13.900	5.340	35814	24	17.948	11.120	35886	8	22.773	18.806				
35674	35	11.504	25.008	35743	12	14.166	5.596	35815*	75	23.902	11.000	35887*	50	23.302	18.495				
35675	41	12.477	25.766	35744	10	17.286	5.584	35816	12	2.365	12.552	35888*	40	23.586	18.998				
35676	13	13.126	25.489	35745	8	17.648	5.930	35817	33	2.755	12.599	35889	16	25.706	18.893				
35677	12	15.802	25.578	35746	9	17.864	5.543	35818	9	4.574	12.485	35890	10	0.550	19.023				
35678	15	18.566	25.861	35747	22	19.202	5.632	35819	18	4.590	12.440	35891	10	1.455	19.168				
35679	21	20.187	25.445	35748	11	19.716	5.026	35820	9	6.836	12.404	35892	12	2.704	19.123				
				35749	17	22.886	5.790	35821	8	7.026	12.699	35893*	35	2.828	19.526				
				35750	24	9.950	6.819	35822	29	8.055	12.277	35894	9	11.051	19.824				
				35751	24	10.427	6.283	35823	27	12.818	12.200	35895	26	14.993	19.013				
				35752	9	11.546	6.489	35824	12	18.002	12.028	35896	11	15.632	19.100				
				35753	26	12.138	6.173	35825	19	18.320	12.848	35897	22	16.447	19.603				
				35754	24	15.464	6.165	35826	27	24.445	12.014	35898	23	17.850	19.352				
				35755	14	19.218	6.032	35827	24	25.532	12.922	35899	10	19.646	19.405				
				35756	15	22.949	6.138	35828	20	0.278	13.994	35900	13	20.096	19.882				
				35757	13	24.025	6.315	35829	17	2.830	13.335	35901	14	22.634	19.216				
				35758	19	24.296	6.106	35830	9	6.214	13.372	35902	19	24.318	19.388				
				35759	22	25.284	6.147	35831	8	8.712	13.263	35903*	40	24.617	19.740				
				35760	20	3.942	7.020	35832	10	9.516	13.064	35904	12	24.831	19.898				
				35761	11	5.926	7.638	35833*	80	10.012	13.753	35905	8	10.029	20.646				
				35762	10	6.980	7.458	35834	20	11.476	13.908	35906	11	11.222	20.262				
				35763	8	10.986	7.431	35835*	39	11.530	13.922	35907	12	21.033	20.411				
				35764	20	11.561	7.046	35836	10	14.511	13.214	35908*	42	1.345	21.608				
				35765	21	12.435	7.516	35837	21	15.810	13.093	35909	18	10.080	21.665				
				35766	13	15.050	7.156	35838	12	18.134	13.334	35910	20	16.210	21.128				
				35767	30	15.808	7.076	35839	13	18.854	13.959	35911	13	19.656	21.781				
				35768	10	16.113	7.824	35840	9	19.687	13.374	35912	10	5.560	22.246				
				35769	12	20.532	7.508	35841	10	21.589	13.916	35913	11	11.166	22.845				
				35770	12	21.134	7.190	35842	14	23.576	13.187	35914	11	11.383	22.825				
				35771	12	23.442	7.762	35843	12	2.412	14.288	35915*	39	11.444	22.272				
				35772	15	0.604	8.622	35844	14	3.635	14.520	35916	12	11.647	22.665				
				35773	22	1.658	8.796	35845	18	4.815	14.966	35917	12	12.814	22.720				
				35774	21	10.464	8.530	35846*	33	7.224	14.446	35918	13	14.050	22.326				
				35775	13	14.644	8.294	35847	9	7.418	14.946	35919*	52	15.350	22.604				
				35776	12	16.078	8.982	35848	20	11.860	14.781	35920	8	16.125	22.668				
				35777	16	17.119	8.415	35849	16	18.113	14.292	35921	13	22.582	22.686				
				35778	14	17.886	8.798	35850	8	20.206	14.830	35922	8	3.400	23.529				
				35779	26	21.016	8.576	35851	13	23.955	14.096	35923	12	5.448	23.023				
				35780	10	22.358	8.630	35852	38	1.028	15.849	35924	18	15.660	23.634				
				35781*	40	23.270	8.578	35853*	40	3.220	15.709	35925	12	19.646	23.627				
				35782	20	23.875	8.177	35854	27	5.674	15.714	35926	13	22.158	23.400				
				35783	8	1.240	9.073	35855	10	6.824	15.752	35927*	68	24.258	23.842				
				35784	12	5.906	9.314	35856	19	14.934	15.190	35928	11	3.736	24.858				
				35785	13	6.476	9.770	35857	15	20.692	15.712	35929	10	7.276	24.335				
				35786	12	9.146	9.834	35858	18	25.374	15.446	35930	15	9.155	24.834				
				35787	25	9.751	9.972	35859	11	2.991	16.966	35931	12	12.992	24.968				
				35788	30	11.118	9.574	35860	11	3.660	16.613	35932	20	13.073	24.151				
				35789	14	13.011	9.706	35861*	40	3.885	16.986	35933	17	14.458	24.090				
				35790	14	14.540	9.412	35862	10	9.798	16.503	35934	14	19.212	24.307				

R.A. 11<sup>h</sup> 8<sup>m</sup>

Plate 990; 1917 Feb. 17.

Provisional Constants.

A	B	C
—0.2572	+0.0568	—1.378

D	E	F
—0.00543	—0.2579	—1.636

Mag



35990	10	6.796	5.612	36062	9	21.498	12.970	36134*	53	9.768	19.540	R.A. 11 <sup>h</sup> 16 <sup>m</sup>  Plate 991 ; 1917 Feb. 17.  Provisional Constants.  A            B            C -0.2562 +0.0438 -0.0046  D            E            F -0.00419 -0.02579 -0.2076  Mag.=16.4-1.09√d	36256	38	5.819	8.838
35991	8	6.810	5.640	36063	13	21.500	12.719	36135	10	10.282	19.416		36257	19	7.755	8.898
35992	17	7.014	5.736	36064	10	23.172	12.882	36136	19	14.182	19.222		36258	24	14.840	8.428
35993	30	9.209	5.294	36065	17	25.981	12.540	36137	12	20.323	19.202		36259	18	19.098	8.402
35994*	40	11.628	5.902	36066	12	1.263	13.260	36138	33	20.989	19.360		36260	21	21.892	8.619
35995	10	17.197	5.360	36067	19	4.670	13.776	36139*	38	21.136	19.534		36261	28	0.814	9.742
35996	13	0.528	6.220	36068	11	5.360	13.802	36140	20	21.934	19.478		36262	19	1.492	9.412
35997	16	1.608	6.381	36069	10	8.432	13.468	36141	8	22.422	19.208		36263	17	7.686	9.504
35998	24	1.875	6.170	36070	9	10.482	13.869	36142	18	23.036	19.688		36264	19	8.501	9.905
35999	31	2.862	6.195	36071	8	14.478	13.408	36143	12	24.855	19.405		36265*	39	12.437	9.350
36000	17	4.368	6.202	36072*	40	18.511	13.144	36144	19	5.382	20.693	36266	13	13.067	9.318	
36001	16	6.840	6.874	36073*	70	19.076	13.506	36145	20	7.316	20.828	36267	19	13.614	9.854	
36002	22	7.144	6.631	36074*	38	21.440	13.029	36146	18	8.704	20.779	36268	20	14.335	9.233	
36003*	26	18.570	6.033	36075	11	23.842	13.172	36147	20	11.516	20.806	36269	19	16.410	9.120	
36004	13	25.844	6.672	36076	10	1.656	14.160	36148	22	13.143	20.948	36270	22	17.706	9.920	
36005	14	1.047	7.834	36077	12	8.666	14.229	36149	12	16.908	20.305	36271	18	21.963	9.566	
36006	8	3.571	7.043	36078	20	9.924	14.934	36150	15	18.988	20.631	36272	36	2.331	10.948	
36007	18	3.834	7.837	36079*	43	11.756	14.226	36151	10	19.212	20.663	36273	24	4.128	10.682	
36008	18	11.637	7.462	36080	15	12.498	14.107	36152	29	19.906	20.596	36274	16	11.066	10.002	
36009	28	14.056	7.378	36081	23	15.722	14.800	36153	10	8.316	21.312	36275	20	10.076	11.461	
36010	10	23.496	7.028	36082	24	18.100	14.156	36154	14	10.160	21.346	36276	16	10.426	11.870	
36011	15	25.832	7.478	36083	30	18.774	14.402	36155	23	11.877	21.794	36277	15	11.756	11.910	
36012*	34	0.883	8.657	36084	19	19.048	14.632	36156	8	15.214	21.964	36278	17	13.632	11.276	
36013	16	1.485	8.244	36085	17	19.239	14.420	36157	16	15.698	21.921	36279	23	14.745	11.718	
36014	10	3.180	8.261	36086	11	21.675	14.523	36158	13	19.824	21.474	36280	29	21.988	11.089	
36015	22	10.026	8.159	36087	13	23.156	14.929	36159	8	24.742	21.634	36281*	37	22.932	11.742	
36016	8	11.027	8.250	36088	19	24.264	14.227	36160	12	0.423	22.774	36282	36	23.892	11.497	
36017	12	11.301	8.327	36089	23	3.098	15.490	36161	13	5.286	22.645	36283	14	1.170	12.964	
36018	12	13.420	8.944	36090	9	8.470	15.170	36162*	39	5.499	22.570	36284	19	3.976	12.592	
36019	11	18.147	8.842	36091	13	8.491	15.133	36163	10	6.626	22.334	36285	15	7.692	12.672	
36020	12	24.254	8.844	36092	10	10.222	15.352	36164	12	13.092	22.205	36286*	60	10.539	12.766	
36021	18	25.840	8.497	36093	15	22.269	15.138	36165	18	14.668	22.028	36287	26	10.873	12.490	
36022	11	1.758	9.785	36094	19	23.248	15.831	36166	25	20.324	22.330	36288	18	12.869	12.083	
36023	11	2.426	9.185	36095	16	2.082	16.072	36167	9	24.390	22.278	36289	34	13.054	12.280	
36024	8	2.952	9.658	36096	11	4.522	16.092	36168	11	0.012	23.493	36290	22	23.944	12.134	
36025	19	3.116	9.619	36097	16	6.328	16.626	36169	10	1.730	23.252	36291	19	1.845	13.245	
36026	28	4.792	9.351	36098	19	10.989	16.408	36170*	65	2.107	23.902	36292	17	4.249	13.601	
36027	10	12.824	9.552	36099	16	11.632	16.712	36171	14	6.165	23.112	36293	20	4.615	13.024	
36028	14	15.548	9.528	36100	20	12.326	16.290	36172	12	7.045	23.900	36294	20	7.697	13.906	
36029	21	19.337	9.798	36101	31	13.234	16.560	36173	12	8.092	23.758	36295	18	11.994	13.176	
36030	12	20.874	9.732	36102*	38	15.395	16.874	36174	23	9.006	23.872	36296	30	14.619	13.070	
36031	25	22.849	9.658	36103*	33	19.480	16.110	36175	11	11.618	23.701	36297	16	15.432	13.630	
36032	11	23.527	9.339	36104	8	21.695	16.110	36176*	43	14.501	23.041	36298	18	17.466	13.203	
36033	17	2.740	10.198	36105	8	22.712	16.345	36177	17	18.296	23.239	36299	13	18.278	13.714	
36034	15	6.636	10.762	36106	30	23.072	16.518	36178	25	22.421	23.107	36300	20	2.274	14.296	
36035	11	10.136	10.664	36107	13	24.304	16.078	36179	10	1.672	24.752	36301	14	2.572	14.162	
36036	11	10.216	10.432	36108	17	24.370	16.692	36180	12	2.650	24.228	36302	12	13.074	14.176	
36037	9	14.857	10.540	36109	18	24.804	16.298	36181	8	3.286	24.190	36303	16	15.037	14.259	
36038	30	24.354	10.878	36110	12	24.979	16.562	36182	10	5.582	24.102	36304	20	15.093	14.799	
36039*	74	1.550	11.070	36111	10	2.122	17.930	36183	12	8.756	24.211	36305	14	21.954	14.475	
36040	21	4.546	11.108	36112	12	10.536	17.562	36184*	44	13.245	24.159	36306	17	22.674	14.706	
36041	10	6.718	11.218	36113	11	15.815	17.180	36185	16	13.376	24.554	36307	23	23.346	14.774	
36042	15	7.657	11.563	36114	8	22.604	17.337	36186	11	18.900	24.004	36308	15	24.509	14.373	
36043	30	8.452	11.609	36115	16	23.480	17.287	36187	9	21.728	24.918	36309	19	0.289	15.226	
36044	12	10.335	11.061	36116	8	0.550	18.888	36188	12	23.592	24.231	36310	16	1.176	15.006	
36045	15	13.840	11.310	36117*	45	1.066	18.570	36189	10	1.522	25.476	36311	28	1.276	15.910	
36046	12	15.270	11.460	36118	22	3.488	18.930	36190	21	8.444	25.234	36312	12	6.554	15.298	
36047	29	17.444	11.656	36119	18	8.110	18.019	36191	8	8.668	25.421	36313	10	6.624	15.441	
36048	20	18.299	11.428	36120	24	11.181	18.968	36192	24	9.627	25.183	36314	14	7.956	15.774	
36049	23	19.414	11.743	36121	9	11.240	18.223	36193	21	10.618	25.580	36315*	39	7.978	15.742	
36050*																



36328	17	2.336	16.148	36400	13	2.754	22.862	36466	13	21.518	3.044	36538*	35	0.999	16.081	<div>R.A. 11<sup>h</sup> 32<sup>m</sup></div> <div>Plate 994 ; 1917 Feb. 18.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>— .02579 + .00162 + .1080</div> <div>D E F</div> <div>— .00175 — .02582 — .2737</div> <div>Mag. = 16.4 — 1.09√d</div>			
36329	21	2.406	16.760	36401	19	8.787	22.849	36467	10	25.164	3.307	36539	9	6.056	16.514				
36330	21	2.838	16.360	36402	12	10.389	22.385	36468	12	3.862	4.418	36540	9	15.910	16.470				
36331	19	3.019	16.624	36403	13	11.164	22.826	36469*	33	10.356	4.546	36541	37	17.364	16.947				
36332	16	7.626	16.674	36404	32	12.158	22.776	36470	13	17.877	4.181	36542*	42	17.544	16.603				
36333	14	8.169	16.770	36405	17	12.636	22.286	36471*	41	22.817	4.592	36543	8	20.160	16.686				
36334	16	14.234	16.966	36406*	45	14.011	22.981	36472	8	0.215	5.604	36544*	33	22.025	16.805				
36335	13	15.101	16.465	36407	23	18.464	22.556	36473	9	6.900	5.080	36545	8	22.417	16.090				
36336	20	15.197	16.379	36408	34	0.528	23.194	36474	11	9.224	5.650	36546	34	25.802	16.466				
36337	16	15.992	16.500	36409	26	5.608	23.341	36475	13	19.133	5.091	36547*	31	4.976	17.993				
36338*	56	17.594	16.127	36410	16	6.455	23.886	36476	12	4.661	6.390	36548	22	14.580	17.362				
36339*	39	20.736	16.601	36411	31	6.728	23.916	36477	25	5.600	6.330	36549	8	23.910	17.656				
36340	17	21.020	16.366	36412	16	8.130	23.036	36478	27	9.924	6.980	36550	14	4.758	18.768				
36341	16	22.890	16.414	36413	40	8.367	23.376	36479	27	19.710	6.026	36551	26	7.918	18.822				
36342	24	1.524	17.362	36414	19	8.621	23.162	36480	11	20.484	6.240	36552*	18	10.313	18.372				
36343	17	5.744	17.491	36415	23	9.846	23.821	36481	31	21.364	6.065	36553	22	20.676	18.821				
36344	15	8.252	17.988	36416*	56	14.995	23.620	36482	19	0.914	7.712	36554	25	2.566	19.725				
36345	20	9.028	17.638	36417	20	24.354	23.013	36483	8	2.055	7.530	36555	8	9.802	19.942				
36346	23	9.254	17.164	36418	17	1.706	24.306	36484*	30	4.975	7.120	36556	8	13.252	19.306				
36347	16	9.384	17.554	36419	28	4.206	24.771	36485*	30	6.354	7.067	36557	23	7.420	20.042				
36348	14	10.757	17.204	36420	13	6.560	24.946	36486	33	18.986	7.576	36558	19	14.060	20.088				
36349	36	11.698	17.931	36421	22	9.494	24.290	36487	19	22.893	7.062	36559*	45	15.952	20.371				
36350*	37	19.068	17.535	36422	18	17.962	24.629	36488	12	6.672	8.596	36560*	30	16.494	20.335				
36351	15	21.072	17.602	36423	36	20.888	24.944	36489*	49	7.306	7.526	36561	8	16.634	20.556				
36352	29	3.266	18.967	36424	48	4.655	25.372	36490	27	14.765	8.698	36562*	49	18.145	20.148				
36353	24	4.784	18.212	36425	54	5.251	25.886	36491*	29	9.868	9.085	36563	9	18.158	20.122				
36354	17	6.406	18.440	36426	12	5.375	25.749	36492	9	22.724	9.196	36564	20	19.450	20.952				
36355	19	6.992	18.010	36427	51	7.700	25.993	36493	11	24.398	9.331	36565	29	1.216	21.894				
36356	24	9.842	18.392	36428	20	8.010	25.677	36494	8	3.734	10.232	36566	15	4.068	21.834				
36357	15	15.507	18.108	36429	60	11.186	25.622	36495	10	4.704	10.018	36567	8	4.526	21.976				
36358	21	19.588	18.652	36430	26	13.162	25.870	36496	8	5.125	10.275	36568	8	6.782	21.403				
36359	22	20.934	18.026	36431	19	17.653	25.572	36497	8	9.319	10.814	36569	8	9.162	21.977				
36360	14	0.484	19.296	36432*	76	18.206	25.006	36498	9	11.754	10.850	36570	9	15.236	21.638				
36361	22	1.103	19.773	36433	41	22.619	25.554	36499	10	12.401	10.953	36571	29	25.523	21.936				
36362	19	2.924	19.469	<div>R.A. 11<sup>h</sup> 24<sup>m</sup></div> <div>Plate 1010 ; 1917 March 3.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>— .02566 + .00520 + .0377</div> <div>D E F</div> <div>— .00535 — .02591 — .0126</div> <div>Mag. = 15.7 — 1.09√d</div>				36500	10	13.186	10.226	36572	8	1.930	22.524	36668	26	16.662	2.518
36363	19	4.668	19.812					36501	13	16.172	10.022	36573	28	2.280	22.005	36669	13	17.443	2.116
36364	20	7.643	19.618					36502	31	24.264	10.582	36574	8	14.482	22.897	36670*	42	20.926	2.356
36365	18	9.394	19.544					36503	25	24.768	10.880	36575	21	16.106	22.917	36671	24	22.540	2.516
36366	23	11.360	19.974					36504	25	1.806	11.774	36576	8	18.213	22.612	36672*	28	4.515	3.405
36367	19	13.232	19.955					36505	18	5.734	11.147	36577	8	25.433	22.202	36673	11	10.810	3.586
36368	36	14.408	19.391					36506	12	6.956	11.105	36578	10	2.414	23.285	36674	11	12.524	3.542
36369	20	15.223	19.112					36507*	32	7.314	11.469	36579	9	7.274	23.744	36675	12	17.958	3.086
36370	31	16.228	19.346					36508	12	10.700	11.576	36580	15	8.874	23.518	36676	12	20.840	3.333
36371	36	16.339	19.942					36509	9	12.100	11.680	36581	10	9.565	23.694	36677*	27	22.284	3.014
36372	37	20.468	19.016					36510	12	23.040	11.126	36582	8	15.530	23.498	36678	15	25.350	3.067
36373	37	20.953	19.626					36511	24	24.472	11.774	36583	9	16.398	23.388	36679*	49	0.654	4.470
36374	27	21.250	19.468					36512*	35	0.850	12.028	36584	31	18.440	23.244	36680	9	6.175	4.350
36375	30	24.550	19.458					36513	17	1.868	12.410	36585	10	21.385	23.718	36681	12	7.893	4.752
36376	19	6.618	20.752					36514	9	14.604	12.604	36586	9	22.296	23.470	36682	13	10.250	4.884
36377	25	7.118	20.556					36515	13	22.136	12.689	36587*	34	25.082	23.709	36683	21	11.087	4.960
36378*	64	7.756	20.386					36516	11	22.750	12.474	36588*	70	4.722	24.724	36684	19	16.008	4.862
36379	22	9.109	20.478					36517	28	15.046	13.376	36589	31	8.464	24.818	36685	14	8.152	5.156
36380	36	12.320	20.329					36518	12	15.216	13.982	36590	14	16.175	24.200	36686	12	9.541	5.240
36381	19	12.852	20.218					36519	19	16.105	13.064	36591	8	24.204	24.307	36687	19	10.746	5.808
36382	13	15.640	20.606					36520	29	17.136	13.888	36592	14	24.873	24.725	36688*	38	11.876	5.560
36383	15	17.102	20.555					36521	8	20.602	13.596	36593	45	25.480	24.197	36689	10	15.765	5.632
36384	20	17.726	20.646					36522	14	22.730	13.145	36594	29	0.710	25.845	36690*	40	16.174	5.036
36385	14	18.006	20.170	36523	8	22.730	13.501	36595	12	5.794	25.160	36691	17	18.214	5.194				
36386	14	19.034	20.846	36524	10	0.629	14.996	36596	12	10.615	25.026	36692	10	23.222	5.176				
36387	16	8.496	21.106	36525	9	2.465	14.639	36597	31	17.476	25.640	36693	12	23.799	5.693				
36388	22	8.945	21.856	36526	8	12.836	14.424	36598	24	21.320	25.200	36694	19	0.748	6.942				
36389	26	9.768	21.849	36527	15	14.526	14.493	36599	8	24.364	25.224	36695	8	13.938	6.280				
36390	28	11.751	21.212	36528	28	16.478	14.267	36600	8	25.797	25.466	36696	20	16.556	6.467				
36391	23	11.990	21.692	36529	10	21.887	14.832					36697	10	17.174	6.812				
36392	22	13.106	21.996	36530	11	24.380	14.780					36698	21	17.610	6.307				
36393	33	13																	



36706	9	16.966	8.645	36778	9	0.188	18.500	<div>R.A. 11<sup>h</sup> 40<sup>m</sup></div> <div>Plate 995; 1917 Feb. 18.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>−0.2596 + −0.0602 + .2354</div> <div>D E F</div> <div>−0.0608 −.02559 −.1611</div> <div>Mag.=15.8−1.09√<i>d</i></div>	36906	11	24.812	8.404	36978	11	22.363	18.034
36707	9	18.620	8.980	36779	13	9.316	18.764		36907	13	25.212	8.144	36979	28	24.216	18.276
36708	8	21.895	8.352	36780	12	13.270	18.405		36908*	40	25.324	8.142	36980	12	3.400	19.220
36709	13	0.600	9.074	36781	11	13.338	18.076		36909	16	6.259	9.116	36981	15	4.772	19.201
36710	14	2.273	9.195	36782	19	16.835	18.210		36910	9	10.424	9.764	36982	19	4.978	19.744
36711	20	10.406	9.560	36783	41	25.576	18.059		36911	10	15.870	9.370	36983	15	6.202	19.099
36712	9	10.959	9.227	36784	27	25.679	18.480		36912	14	17.907	9.046	36984	10	8.146	19.147
36713	23	11.163	9.652	36785	10	4.978	19.134		36913	12	0.564	10.824	36985	19	8.216	19.924
36714	18	11.512	9.140	36786	10	12.523	19.071		36914	12	12.800	10.253	36986	16	11.016	19.696
36715*	35	12.220	9.112	36787	13	15.239	19.998		36915	17	14.369	10.031	36987	24	15.090	19.548
36716	31	2.148	10.447	36788	25	16.948	19.320	36916*	38	20.403	10.603	36988	33	19.663	19.252	
36717	23	2.655	10.740	36789	12	20.100	19.039	36917	38	0.300	11.412	36989*	40	22.804	19.757	
36718	11	12.341	10.418	36790	12	20.661	19.619	36918*	33	4.398	11.216	36990	14	24.535	19.370	
36719	10	13.398	10.039	36791	11	19.697	20.623	36919	10	4.758	11.464	36991	13	3.482	20.464	
36720	23	13.720	10.757	36792	10	25.306	20.352	36920	11	13.098	11.821	36992	13	8.310	20.880	
36721	11	14.237	10.262	36793	28	3.496	21.790	36921	10	17.059	11.897	36993	12	14.757	20.016	
36722*	50	16.130	10.377	36794*	37	6.166	21.142	36922*	47	17.537	11.414	36994	24	15.295	20.297	
36723	11	19.766	10.524	36795	17	7.470	21.294	36923	11	19.777	11.791	36995	20	4.215	21.769	
36724	11	22.539	10.662	36796	13	7.834	21.512	36924*	37	20.416	11.708	36996*	65	4.792	21.145	
36725	12	0.930	11.000	36797	14	8.622	21.540	36925	8	22.320	11.537	36997	10	8.934	21.453	
36726	26	2.366	11.636	36798	14	11.834	21.455	36926	10	22.386	11.231	36998	10	9.102	21.605	
36727	10	6.461	11.142	36799	42	13.623	21.406	36927	8	6.386	12.048	36999	11	9.456	21.016	
36728	10	11.214	11.693	36800	10	13.668	21.500	36928	11	7.195	12.331	37000	11	10.366	21.501	
36729	12	12.146	11.358	36801	33	19.422	21.877	36929	17	8.066	12.703	37001	13	15.778	21.022	
36730	11	13.154	11.120	36802	8	22.702	21.216	36930	9	8.664	12.386	37002*	42	24.490	21.623	
36731	8	16.820	11.824	36803	11	3.412	22.057	36931	10	10.550	12.087	37003	14	3.670	22.689	
36732	15	17.907	11.418	36804	40	7.546	22.152	36932	12	12.034	12.639	37004	24	6.450	22.232	
36733*	41	20.066	11.984	36805	10	10.105	22.230	36933	26	17.404	12.119	37005	27	9.076	22.584	
36734	16	21.394	11.180	36806	12	12.534	22.924	36934	19	19.609	12.188	37006	17	10.086	22.472	
36735*	46	22.272	11.246	36807	8	17.260	22.832	36935	10	20.870	12.431	37007*	40	11.825	22.508	
36736	17	0.036	12.570	36808	13	25.456	22.573	36936	18	0.217	13.417	37008	36	0.051	23.823	
36737	12	0.648	12.350	36809	10	0.285	23.347	36937	11	0.786	13.978	37009	10	7.194	23.306	
36738*	26	8.607	12.164	36810*	47	3.070	23.566	36938	11	1.807	13.904	37010	21	15.620	23.022	
36739	13	9.613	12.560	36811*	44	8.551	23.612	36939	22	3.302	13.038	37011	22	0.244	24.952	
36740	11	13.084	12.569	36812	9	8.582	23.080	36940	13	4.419	13.362	37012	12	11.064	24.112	
36741	27	17.179	12.426	36813*	39	11.864	23.766	36941	14	11.816	13.304	37013	9	19.478	24.870	
36742	27	25.244	12.918	36814	9	13.912	23.334	36942	18	17.610	13.770	37014	28	19.566	24.984	
36743	14	0.636	13.022	36815	10	16.636	23.760	36943	23	24.864	13.122	37015	34	21.132	24.572	
36744	10	0.638	13.378	36816*	45	17.363	23.426	36944	10	25.322	13.615	37016	12	22.088	24.490	
36745	12	9.664	13.800	36817	9	20.917	23.682	36945	20	25.327	13.226	37017	22	1.148	25.366	
36746	26	10.002	13.433	36818*	36	21.820	23.650	36946	11	0.184	14.193	37018	22	10.867	25.165	
36747	13	11.121	13.353	36819	17	2.870	24.583	36947	20	4.762	14.192	37019	80	11.252	25.798	
36748	10	14.277	13.333	36820*	66	3.469	24.053	36948	14	6.942	14.124	37020	15	11.624	25.416	
36749	19	22.152	13.248	36821	22	4.141	24.914	36949	12	9.180	14.744	37021	13	16.404	25.472	
36750	10	22.714	13.820	36822*	66	7.790	24.156									
36751	10	23.738	13.762	36823	38	8.073	24.254									
36752	14	2.297	14.641	36824	12	12.558	24.740									
36753	35	15.880	14.789	36825	10	2.873	25.628									
36754	10	22.108	14.026	36826	12	3.803	25.317									
36755	9	0.346	15.970	36827	10	7.584	25.096									
36756	18	1.452	15.298	36828	31	10.710	25.282									
36757*	49	1.969	15.514	36829	10	11.434	25.334									
36758	25	3.616	15.676	36830	53	15.872	25.937									
36759	10	10.198	15.558	36831	31	19.334	25.087									
36760	15	11.022	15.122	36832	12	19.356	25.659									
36761	8	13.488	15.914	36833	13	22.889	25.212									
36762	12	14.486	15.802													
36763	17	25.086	15.349													
36764	8	1.386	16.326													
36765	41	3.732	16.318													
36766	14	3.978	16.942													
36767	15	7.132	16.439													
36768	34	9.693	16.990													
36769	10	12.716	16.402													
36770	14	15.800	16.995													
36771	8	20.187	16.315													
36772	10	1.849	17.522													
36773	9	5.047	17.277													
36774	12	9.180	17.892													
36775	13	11.655	17.653													
36776																



37055	17	13.752	0.678	37127	9	12.904	10.756	37199	12	9.436	21.322	37264	22	13.734	2.563	37336	21	4.033	10.774
37056	31	17.886	0.818	37128	11	13.773	10.113	37200*	35	14.516	21.612	37265	10	18.188	2.760	37337	28	4.119	10.036
37057	10	18.304	0.141	37129	12	15.719	10.748	37201	12	14.540	21.247	37266	14	19.920	2.344	37338	9	10.614	10.524
37058	14	21.778	0.499	37130	9	16.620	10.737	37202	8	16.368	21.290	37267	10	20.189	2.427	37339*	36	14.044	10.760
37059	9	6.166	1.188	37131	8	19.040	10.490	37203	14	16.867	21.718	37268	17	8.138	3.486	37340*	46	14.300	10.036
37060	14	17.008	1.356	37132	8	0.208	11.266	37204	13	22.582	21.622	37269	26	9.032	3.438	37341	22	18.709	10.574
37061	9	19.042	1.568	37133	9	13.349	11.151	37205	19	4.690	22.696	37270	27	13.085	3.315	37342*	42	23.423	10.482
37062	11	21.766	1.881	37134	8	18.580	11.120	37206	17	6.268	22.436	37271*	45	14.401	3.640	37343	17	1.514	11.476
37063	15	22.591	1.190	37135	12	20.670	11.416	37207	12	6.922	22.864	37272	31	16.513	3.257	37344	8	3.396	11.729
37064	36	23.284	1.018	37136	16	23.755	11.067	37208	18	8.677	22.242	37273	35	17.626	3.500	37345	9	4.686	11.786
37065	19	25.541	1.082	37137*	48	5.173	12.954	37209	8	14.346	22.540	37274	9	19.348	3.509	37346	8	5.481	11.360
37066	10	2.496	2.607	37138	11	8.087	12.332	37210	19	15.169	22.937	37275	9	20.174	3.230	37347	10	12.822	11.224
37067	8	3.074	2.237	37139	8	10.152	12.901	37211	12	15.716	22.346	37276	19	20.254	3.162	37348	11	14.738	11.614
37068	12	5.830	2.846	37140	14	11.800	12.474	37212	12	16.202	22.867	37277	11	20.664	3.772	37349	10	15.846	11.462
37069*	38	6.198	2.785	37141	11	17.870	12.118	37213	9	18.175	22.302	37278	8	22.788	3.528	37350	26	1.351	12.457
37070	20	8.502	2.637	37142	20	23.587	12.047	37214	9	21.292	22.839	37279	24	25.889	3.045	37351	12	4.550	12.250
37071	20	13.865	2.944	37143	24	2.713	13.124	37215	10	3.213	23.026	37280	11	1.817	4.924	37352	10	10.134	12.946
37072	25	16.179	2.882	37144	20	3.177	13.220	37216	14	5.734	23.464	37281	22	2.278	4.376	37353	21	10.942	12.462
37073	18	16.375	2.581	37145	8	3.180	13.608	37217*	38	15.084	23.376	37282	19	5.160	4.276	37354	9	12.631	12.556
37074	18	16.740	2.365	37146*	34	5.732	13.847	37218	11	16.382	23.938	37283*	34	8.810	4.800	37355	11	14.905	12.544
37075*	38	8.775	3.396	37147	8	7.240	13.136	37219*	25	18.024	23.332	37284	8	16.001	4.978	37356*	38	23.305	12.688
37076*	30	13.569	3.053	37148	10	10.264	13.222	37220	11	19.648	23.212	37285	14	18.667	4.924	37357	15	24.692	12.657
37077	11	17.189	3.524	37149	11	12.490	13.765	37221	11	1.622	24.238	37286	14	19.280	4.016	37358	30	25.188	12.020
37078	16	24.560	3.969	37150	18	19.210	13.143	37222	26	13.976	24.870	37287	8	22.105	4.504	37359	33	2.478	13.678
37079	9	1.928	4.257	37151	28	24.706	13.274	37223	10	14.238	24.666	37288	9	25.360	4.406	37360	10	2.504	13.670
37080	13	3.574	4.241	37152	11	25.004	13.833	37224	10	18.810	24.033	37289	11	25.518	4.294	37361	29	3.700	13.949
37081	8	4.303	4.806	37153	21	25.929	13.548	37225	27	19.298	24.150	37290	18	25.886	4.547	37362	8	4.466	13.638
37082	25	5.400	4.658	37154	13	2.210	14.890	37226	28	20.986	24.884	37291*	50	3.844	5.898	37363	10	4.588	13.636
37083	21	9.164	4.442	37155	19	6.274	14.899	37227	15	23.038	24.403	37292	9	6.732	5.000	37364	17	5.310	13.398
37084	18	9.290	4.114	37156*	39	12.474	14.023	37228	9	10.116	25.420	37293	18	15.152	5.512	37365	10	7.388	13.379
37085	10	10.338	4.742	37157	12	15.161	14.710	37229	12	11.515	25.330	37294	12	17.434	5.512	37366	8	10.141	13.115
37086	14	16.928	4.898	37158	12	19.550	14.355	37230	20	15.070	25.450	37295	11	19.944	5.678	37367*	115	12.100	13.790
37087	31	18.486	4.196	37159	16	20.294	14.542	37231	11	17.971	25.992	37296	9	20.486	5.094	37368*	33	13.661	13.912
37088	9	2.212	5.688	37160*	35	22.834	14.943	37232	15	18.962	25.374	37297	8	0.086	6.912	37369*	37	17.125	13.588
37089	30	7.445	5.412	37161	12	25.757	14.650	37233	14	25.686	25.919	37298	16	3.126	6.052	37370	19	20.222	13.412
37090*	35	7.734	5.634	37162	9	2.336	15.344					37299	17	9.346	6.886	37371	18	21.499	13.780
37091	8	7.802	5.977	37163*	36	5.268	15.629					37300	9	9.981	6.493	37372	36	22.926	13.941
37092	31	8.247	5.341	37164	8	5.816	15.846					37301	34	15.186	6.424	37373	8	5.748	14.346
37093	12	9.379	5.322	37165	11	6.960	15.451					37302	21	16.020	6.902	37374	17	6.824	14.304
37094	12	11.562	5.872	37166*	35	20.612	15.761					37303	17	0.202	7.864	37375	10	13.938	14.789
37095	8	14.335	5.007	37167	11	1.382	16.129					37304	8	2.688	7.967	37376	8	14.320	14.834
37096	15	15.722	5.623	37168*	37	1.613	16.589					37305	8	3.855	7.695	37377	18	20.058	14.492
37097	13	25.397	5.650	37169	11	17.530	16.649					37306	14	6.939	7.038	37378	8	25.248	14.422
37098	21	1.570	6.024	37170	10	17.750	16.643					37307*	33	17.796	7.660	37379	18	25.685	14.090
37099*	33	1.911	6.996	37171	10	18.624	16.497					37308	11	18.678	7.104	37380*	39	0.610	15.358
37100	12	4.424	6.274	37172	9	22.981	16.085					37309	12	20.488	7.520	37381	13	3.535	15.049
37101	8	5.576	6.437	37173	9	0.193	17.650					37310*	29	20.988	7.584	37382	11	7.450	15.706
37102	26	9.764	6.092	37174	15	3.848	17.220					37311	14	1.980	8.958	37383	31	9.035	15.236
37103	10	12.542	6.956	37175*	40	10.904	17.191					37312	28	2.090	8.738	37384	9	10.694	15.820
37104	19	15.730	6.144	37176*	30	21.048	17.172					37313	36	4.505	8.423	37385	8	13.659	15.713
37105	8	19.099	6.302	37177	8	0.282	18.068					37314	10	9.957	8.471	37386	13	17.445	15.184
37106	11	0.258	7.565	37178	20	2.136	18.288					37315	25	10.277	8.434	37387	34	22.190	15.572
37107	27	5.704	7.178	37179	12	10.192	18.898					37316	10	10.756	8.700	37388	12	0.768	16.498
37108*	38	8.872	7.870	37180	13	16.508	18.930					37317	12	14.438	8.744	37389	10	4.497	16.748
37109	13	22.464	7.448	37181	8	19.424	18.390					37318	16	15.434	8.724	37390	10	5.256	16.312
37110	9	2.594	8.408	37182	30	23.892	18.588					37319	9	17.800	8.290	37391	8	21.044	16.953
37111	10	2.994	8.142	37183*	33	0.740	19.786					37320*	32	18.030	8.604	37392	25	7.646	17.621
37112*	38	3.104	8.137	37184	9	2.469	19.376					37321	28	19.378	8.090	37393	35	12.336	17.918
37113	19	3.900	8.400	37185	12	7.988	19.680					37322*	33	21.969	8.000	37394	12	15.150	17.288
37114	21	7.437	8.218	37186	16	8.816	19.228					37323	15	1.464	9.442	37395	34	24.695	17.892
37115	18	7.440	8.780	37187	8	14.828	19.532					37324	8	6.335	9.530	37396	36	1.691	18.994
37116	8	9.432	8.717	37188	12	18.514	19.340					37325	30	6.824	9.567	37397*	37	5.236	18.696
37117*	65	10.468	8.222	37189	14	6.062	20.650					37326	22	10.980	9.254	37398	26	5.855	18.163
37118*	41	11.870	8.032	37190	12	8.564	20.104					37327	9	11.052	9.366	37399	8	8.041	18.052
37119	8	24.235	8.550	37191	10	10.494	20.503					37328	36	13.174	9.539	37400	12	8.361	18.450
37120	23	24.348	8.330	37192	10	11.734	20.650					37329	26	15.966	9.264	37401	12	10.070	18.160
37121	18	11.702	9.000	37193	12	17.													



37408	19	8.510	19.604	<div>R.A. 12<sup>h</sup> 4<sup>m</sup></div> <div>Plate 1012 ; 1917 March 19.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>-02545 +00161 +.1311</div> <div>D E F</div> <div>-00188 -02593 -0.1679</div> <div>Mag.=15.7-1.09√d</div>	37556	10	24.674	10.032	37628	13	8.641	23.465	37683	11	4.293	6.554
37409	8	9.690	19.672		37557	17	3.065	11.946	37629	14	20.915	23.604	37684	10	10.524	6.062
37410	9	11.271	19.035		37558	9	16.962	11.346	37630	18	3.491	24.546	37685*	39	4.895	7.900
37411	11	9.238	20.958		37559	19	18.730	11.636	37631*	27	7.436	24.397	37686	9	8.366	7.764
37412	32	11.441	20.936		37560	20	23.616	11.000	37632	24	8.874	24.196	37687	13	8.692	7.282
37413	9	14.001	20.474		37561*	40	1.183	12.632	37633	12	12.905	24.220	37688	16	11.231	7.228
37414	31	17.758	20.264		37562	11	2.574	12.588	37634	21	13.405	24.801	37689	9	13.898	7.267
37415	10	24.829	20.296		37563*	35	7.020	12.186	37635	10	13.470	24.075	37690	12	21.596	7.414
37416	27	3.786	21.154		37564	9	12.513	12.390	37636	9	14.674	24.578	37691	9	22.406	7.312
37417	15	3.900	21.629		37565	13	16.276	12.444	37637	22	14.962	24.698	37692	29	1.494	8.720
37418	8	5.876	21.632	37566	14	16.418	12.498	37638	9	21.406	24.020	37693	12	7.155	8.722	
37419	28	6.175	21.718	37567	19	16.498	12.446	37639	42	0.228	25.025	37694	15	19.487	8.881	
37420*	45	7.456	21.818	37568	10	22.186	12.570	37640	8	2.983	25.602	37695*	34	19.688	8.989	
37421	21	8.945	21.442	37569	11	25.162	12.884	37641	9	7.626	25.994	37696*	37	19.909	8.328	
37422	15	10.015	21.096	37570	36	0.820	13.891	37642	10	13.546	25.384	37697	10	21.868	8.992	
37423	8	14.400	21.742	37571	8	3.150	14.346	37643	22	23.931	25.055	37698	10	22.258	8.740	
37424	26	15.266	21.256	37572	13	3.582	14.013					37699	23	23.480	8.330	
37425	10	15.442	21.130	37573	10	7.888	14.322					37700	15	25.876	8.318	
37426	29	16.359	21.510	37574	8	12.675	14.775					37701	10	25.958	8.208	
37427	10	22.246	21.008	37575*	46	16.050	14.976					37702	8	3.580	9.916	
37428	27	23.424	21.395	37576*	14	19.106	14.644					37703	28	7.257	9.232	
37429	13	24.222	21.570	37577	11	20.846	14.719					37704	20	9.264	9.866	
37430	8	24.336	21.811	37578	28	0.101	15.529					37705	14	9.964	9.273	
37431	10	25.652	21.410	37579	13	5.067	15.282					37706	13	13.255	9.566	
37432	10	0.403	22.036	37580*	36	10.120	15.360					37707*	31	13.312	9.800	
37433	20	7.756	22.828	37581	37	14.726	15.574					37708	25	17.178	9.156	
37434	31	11.550	22.600	37582*	41	22.440	15.568					37709	8	20.512	9.458	
37435	31	12.037	22.892	37583	9	5.632	16.481					37710*	40	20.519	9.204	
37436	9	13.196	22.750	37584*	32	12.398	16.890					37711	30	21.606	9.522	
37437	18	17.361	22.804	37585*	43	14.548	16.264					37712	12	2.603	10.168	
37438	33	18.269	22.917	37586	10	19.202	16.272					37713	12	4.560	10.722	
37439	15	20.414	22.320	37587*	54	20.222	16.845					37714*	40	7.704	10.614	
37440	9	20.425	22.679	37588*	46	21.550	16.190					37715	19	8.390	10.781	
37441	12	21.681	22.730	37589	8	22.686	16.738					37716	32	9.538	10.118	
37442	10	8.175	23.645	37590	27	2.632	17.824					37717	27	1.563	11.152	
37443	23	10.714	23.686	37591*	30	18.554	17.914					37718	8	1.951	11.705	
37444	14	14.710	23.224	37592*	40	21.496	17.578					37719	17	14.973	11.198	
37445	23	15.070	23.856	37593*	44	4.833	18.168					37720	9	17.373	11.148	
37446	8	16.441	23.255	37594*	11	11.534	18.158					37721	12	23.718	11.055	
37447*	21	24.200	23.617	37595*	15	11.616	18.506					37722	22	24.294	11.792	
37448	18	0.874	24.815	37596*	37	14.712	18.210					37723	8	25.454	11.469	
37449	29	9.254	24.334	37597	10	15.525	18.104					37724	13	0.160	12.746	
37450	13	12.976	24.396	37598	8	20.233	18.914					37725	9	4.022	12.247	
37451	8	16.549	24.425	37599	40	22.810	18.286					37726	10	10.004	12.724	
37452	28	18.098	24.187	37600	34	25.592	18.468					37727	16	25.798	12.815	
37453*	36	20.834	24.248	37601	9	6.854	19.890					37728	12	3.139	13.008	
37454	18	25.479	24.620	37602*	41	15.694	19.747					37729	8	15.537	13.948	
37455	32	9.074	25.928	37603*	40	22.278	19.050					37730	18	19.808	13.098	
37456*	48	12.290	25.180	37604	8	24.080	19.717					37731	10	25.270	13.892	
37457	22	12.706	25.538	37605	9	2.792	20.226					37732	8	1.500	14.700	
37458	8	13.164	25.834	37606*	18	8.726	20.848					37733	10	8.354	14.702	
37459	54	13.600	25.530	37607*	28	9.206	20.438					37734	12	8.581	14.550	
37460	13	14.181	25.490	37608	12	22.412	20.217					37735	12	0.156	15.243	
37461*	40	22.214	25.064	37609	18	1.398	21.340					37736	38	0.461	15.740	
				37610	11	2.200	21.508					37737	8	6.652	15.502	
				37611	8	3.630	21.333					37738	16	7.187	15.184	
				37612*	38	4.510	21.082					37739	19	10.392	15.118	
				37613	11	5.915	21.945					37740	14	13.530	15.848	
				37614	14	7.062	21.350					37741	8	17.024	15.944	
				37615	8	11.992	21.704					37742	13	21.088	15.488	
				37616	28	15.862	21.028					37743	31	22.900	15.819	
				37617	27	22.760	21.513					37744	9	0.240	16.764	
				37618	35	23.254	21.810					37745	13	4.604	16.424	
				37619	13	24.872	21.040					37746	27	9.474	16.208	
				37620	52	25.505	21.524					37747	12	18.972	16.727	
				37621	15	25.602	21.960					37748	35	20.120	16.932	
				37622	8	23.125	22.594					37749	21	21.826	16.140	
				37623	34	23.736	22.134					37750*	39	22.968	16.454	
				37624	9	2.037	23.406					37751	10	23.528	16.249	
				37625*	20	2.200	23.552					37752	9	11.063	17.742	
				37626	9	6.467	23.334					37753	18	13.099	17.434	
				37627*	25	6.790	23.176					37754	9	13.648	17.542	



37755	21	15.974	17.662	37827	9	13.452	25.972	37892	21	1.325	8.220	37964	8	24.334	20.464	38014	12	10.755	2.868
37756	9	18.068	17.372	37828	23	14.414	25.072	37893	12	3.725	8.190	37965	10	5.759	21.761	38015	10	12.616	2.348
37757	21	25.948	17.390	37829	14	15.672	25.921	37894	10	3.810	8.077	37966	14	10.964	21.744	38016	37	15.974	2.876
37758	36	0.876	18.452	37830	8	16.667	25.670	37895*	59	9.278	8.466	37967	27	14.390	21.853	38017	37	17.834	2.948
37759*	32	3.662	18.585	37831	14	20.626	25.873	37896	9	9.989	8.548	37968	13	15.363	21.620	38018	15	18.810	2.272
37760	8	9.226	18.709	37832	9	22.200	25.312	37897	25	12.558	8.048	37969	13	15.363	21.515	38019	13	19.428	2.768
37761	10	10.500	18.634	37833	32	24.164	25.978	37898	12	15.015	8.572	37970	12	17.820	21.926	38020	15	20.605	2.588
37762	13	16.376	18.008					37899	27	15.361	8.460	37971	10	19.516	21.972	38021	8	21.763	2.669
37763	8	20.484	18.857					37900*	62	16.574	9.510	37972	9	21.490	21.894	38022*	29	4.832	3.008
37764	10	22.768	18.693					37901	14	20.369	9.062	37973*	38	2.474	22.260	38023	20	5.374	3.095
37765	41	0.359	19.222					37902	10	24.212	9.341	37974*	26	6.486	22.175	38024*	41	10.886	3.013
37766	12	2.174	19.858					37903	11	1.585	10.944	37975	18	13.426	22.776	38025	21	19.534	3.655
37767*	42	5.598	19.043					37904	9	6.732	10.116	37976	18	16.009	22.786	38026	9	20.686	3.058
37768	9	5.840	19.208					37905*	58	13.706	10.010	37977	24	18.637	22.589	38027	14	21.441	3.376
37769	11	6.164	19.418					37906	12	23.258	10.214	37978*	40	18.647	22.600	38028	12	5.369	4.586
37770	8	6.978	19.338					37907	12	2.164	11.676	37979	11	22.044	22.356	38029	9	9.697	4.744
37771	21	7.944	19.150					37908	10	8.548	11.853	37980	19	0.216	23.620	38030	11	13.775	4.947
37772	31	9.294	19.042					37909	13	13.524	11.145	37981	13	6.820	23.388	38031	20	16.350	4.975
37773	20	11.458	19.051					37910	24	15.541	11.094	37982	15	10.590	23.710	38032	20	18.928	4.084
37774	28	15.518	19.893					37911	10	19.796	11.650	37983	14	14.016	23.012	38033*	37	21.237	4.682
37775	31	16.547	19.582					37912	22	25.739	11.169	37984	10	20.145	23.649	38034*	38	7.238	5.996
37776	14	18.793	19.748					37913	12	3.678	12.690	37985	17	20.468	23.942	38035	21	10.184	5.196
37777	29	23.411	19.494					37914	10	5.132	12.652	37986	34	0.578	24.838	38036*	33	10.650	5.438
37778	28	24.416	19.646					37915*	70	9.732	12.503	37987	18	1.956	24.406	38037	9	12.335	5.602
37779	13	0.516	20.386					37916	25	9.814	12.116	37988	13	15.310	24.435	38038	24	20.360	5.000
37780	31	21.098	20.470					37917*	46	12.048	12.240	37989	13	16.778	24.837	38039*	33	22.504	5.995
37781	28	21.229	20.711					37918*	27	21.460	12.580	37990	8	21.903	24.956	38040	13	3.732	6.006
37782	8	21.437	20.020					37919	8	7.776	13.826	37991	35	2.133	25.860	38041*	30	4.952	6.560
37783*	44	22.656	20.347					37920	11	21.682	13.756	37992	11	6.842	25.546	38042	11	8.300	6.640
37784	27	0.881	21.676					37921	8	25.537	14.876	37993	11	8.150	25.590	38043	22	10.386	6.935
37785	32	1.381	21.962					37922	25	0.799	15.712	37994	29	8.326	25.940	38044	20	11.074	6.323
37786	21	2.986	21.168					37923	22	7.854	15.961	37995	10	9.892	25.634	38045	18	11.838	6.308
37787*	52	3.624	21.641					37924	24	12.694	15.015	37996	8	15.784	25.526	38046	10	15.942	6.088
37788	8	4.424	21.967					37925	10	12.700	15.518	37997	16	18.779	25.900	38047	17	19.930	6.152
37789	8	7.740	21.126					37926	10	22.760	15.927	37998	19	21.794	25.798	38048	15	21.786	6.328
37790	19	11.182	21.042					37927*	38	0.868	16.346					38049	10	25.767	6.512
37791	15	14.766	21.332					37928	10	1.428	16.138					38050	10	1.982	7.626
37792	13	16.788	21.688					37929	9	8.348	16.484					38051	16	2.682	7.504
37793	12	17.810	21.507					37930*	23	8.539	16.430					38052	13	6.665	7.340
37794*	39	20.026	21.850					37931	14	10.211	16.902					38053	25	6.694	7.624
37795	9	20.743	21.970					37932	25	10.606	16.807					38054	15	8.525	7.542
37796	17	20.756	21.860					37933*	40	12.114	16.007					38055	11	12.714	7.514
37797	12	1.267	22.748					37934	10	21.886	16.854					38056	10	12.756	7.550
37798	34	1.872	22.277					37935	8	3.810	17.444					38057	11	16.028	7.390
37799	27	3.734	22.075					37936	14	3.857	17.262					38058*	20	16.126	7.334
37800*	11	5.682	22.749					37937	12	5.516	17.305					38059	15	19.156	7.352
37801*	32	6.887	22.758					37938	10	5.590	17.784					38060	13	22.764	7.180
37802	14	7.143	22.878					37939	14	8.956	17.546					38061	20	23.810	7.432
37803	10	14.184	22.358					37940	9	11.291	17.757					38062	20	24.498	7.382
37804	15	18.704	22.444					37941*	37	18.279	17.292					38063	17	5.004	8.200
37805	10	19.822	22.298					37942*	51	18.355	17.112					38064	20	8.275	8.646
37806	8	22.496	22.662					37943	15	5.246	18.511					38065	8	8.481	8.506
37807*	36	24.530	22.380					37944	11	6.403	18.107					38066	8	11.152	8.564
37808	15	4.972	23.337					37945	21	7.531	18.014					38067	10	11.391	8.096
37809*	53	8.725	23.962					37946*	51	8.688	18.545					38068	8	13.556	8.260
37810	21	10.794	23.720					37947*	45	11.576	18.356					38069	11	19.234	8.820
37811	25	14.435	23.422					37948	14	11.576	18.049					38070	16	21.516	8.812
37812	8	14.461	23.071					37949	15	17.818	18.368					38071	10	21.653	8.475
37813	8	14.528	23.964					37950*	20	21.354	18.707					38072	8	22.880	8.603
37814	9	15.314	23.049					37951	22	1.334	19.384					38073	10	1.970	9.592
37815	10	22.116	23.102					37952	17	2.340	19.527					38074	20	7.826	9.674
37816	22	22.264	23.720					37953	12	16.355	19.590					38075	10	8.984	9.945
37817	8	3.314	24.048					37954	11	24.376	19.206					38076	15	1.031	10.476
37818	21	4.950	24.841					37955*	46	0.582	20.242					38077	15	3.052	10.083
37819	10	6.564	24.820					37956	11	5.492	20.071					38078	9	4.983	10.828
37820	16	8.966	24.366					37957	14	8.129	20.544					38079	8	5.393	10.200
37821	10	13.614	24.402					37958	24	8.133	20.498					38080	10	7.646	10.295
37822	18	15.154	24.878					37959	20	11.820	20.839					38081	10	12.227	10.402
37823	27	18.608	24.218					37960	9	14.207	20.815					38082	10	16.373	10.876
37824	36	22.618	24.942					37961	10	19.324	20.593					38083	12	19.816	10.936
37825	12	23.996	25.520					37962	12	19.499	20.010					38084	23	20.484	10.164
37826	32	2.116	25.198					37963	16	23.440	20.762					38085	10	20.670	10.355

R.A. 12<sup>h</sup> 20<sup>m</sup>

Plate 1013; 1917 March 19.

Provisional Constants.

A	B	C
-02554	+00301	+2066

D	E	F
-00281	-02582	-3447



38086	24	3.525	11.396	38158	10	23.364	19.516	38255	10	8.034	0.468	38327	12	24.214	10.342	39399	12	4.306	22.794
38087	13	17.774	11.225	38159	12	24.056	19.344	38256	44	9.645	0.503	38328	23	5.990	11.188	38400	15	6.050	22.812
38088	11	4.928	12.351	38160	24	25.355	19.297	38257	15	10.886	0.621	38329*	36	8.284	11.834	38401	27	6.884	22.367
38089	24	6.860	12.990	38161	12	2.261	20.710	38258	21	14.157	0.468	38330	8	12.082	11.691	38402	15	11.853	22.158
38090*	53	7.164	12.982	38162	10	8.522	20.518	38259	8	14.734	0.508	38331	30	14.420	11.244	38403	22	13.871	22.966
38091	19	8.404	12.595	38163	12	13.642	20.144	38260	16	15.406	0.702	38332*	32	16.776	11.747	38404	20	14.532	22.269
38092	10	9.910	12.655	38164	25	16.554	20.359	38261	44	21.815	0.084	38333	20	1.284	12.974	38405	23	18.737	22.876
38093	13	12.226	12.436	38165	9	21.800	20.422	38262	8	0.588	1.737	38334*	40	3.045	12.783	38406	10	19.568	22.514
38094	9	19.316	12.453	38166	13	23.539	20.778	38263	37	6.627	1.418	38335	8	11.182	12.928	38407	15	25.376	22.629
38095	33	19.906	12.310	38167	10	1.126	21.254	38264	30	6.674	1.007	38336	11	13.856	12.342	38408	34	0.074	23.782
38096*	13	20.322	12.557	38168	18	1.368	21.023	38265*	33	12.626	1.981	38337	8	15.806	12.848	38409*	34	6.388	23.816
38097	15	23.360	12.914	38169*	42	6.933	21.413	38266	14	14.374	1.918	38338	30	23.462	12.044	38410	9	7.419	23.588
38098*	40	25.126	12.744	38170	10	8.188	21.250	38267	12	25.976	1.868	38339	27	4.312	13.782	38411	17	16.656	23.864
38099	12	5.499	13.222	38171	13	18.477	21.959	38268*	33	4.502	2.288	38340	12	6.977	13.500	38412	13	17.654	23.407
38100	14	9.260	13.259	38172	14	24.144	21.094	38269	10	8.216	2.415	38341	10	10.356	13.082	38413	19	9.800	24.996
38101	11	12.361	13.313	38173	21	5.512	22.186	38270	10	14.502	2.680	38342	8	17.460	13.902	38414*	46	13.669	24.862
38102	17	13.530	13.638	38174	12	12.230	22.826	38271	14	18.307	2.163	38343	12	22.428	13.408	38415	10	16.702	24.616
38103	15	14.498	13.103	38175	16	12.350	22.174	38272	11	23.683	2.211	38344*	39	7.061	14.271	38416	16	22.321	24.150
38104	10	14.906	13.341	38176	15	12.965	22.772	38273*	38	10.061	3.627	38345*	48	11.451	14.472	38417	8	6.808	25.890
38105	16	21.733	13.430	38177	13	13.301	22.210	38274	8	11.920	3.935	38346*	100	14.512	14.832	38418	15	8.958	25.684
38106	9	7.363	14.743	38178	16	14.432	22.026	38275	8	13.408	3.791	38347	13	17.910	14.034	38419	12	12.150	25.143
38107	25	10.682	14.972	38179	10	21.780	22.627	38276	12	14.012	3.697	38348	8	18.083	14.017	38420	20	13.610	25.064
38108	11	10.904	14.770	38180	15	4.349	23.458	38277	11	24.036	3.553	38349	17	0.092	15.458	38421	18	17.715	25.530
38109	10	10.963	14.531	38181*	35	5.990	23.724	38278	8	7.434	4.108	38350	10	5.340	15.528	38422	31	21.514	25.498
38110	8	18.519	14.098	38182*	27	10.695	23.401	38279	17	9.454	4.788	38351	9	5.454	15.052	38423	12	21.570	25.260
38111	14	20.910	14.569	38183	11	11.040	23.464	38280	17	14.774	4.742	38352	9	12.890	15.324	38424	10	24.114	25.738
38112	9	23.378	14.963	38184	10	12.184	23.189	38281*	22	15.640	4.029	38353	12	18.976	15.712				
38113	10	6.452	15.588	38185*	40	13.931	23.620	38282	9	15.954	4.565	38354	26	22.454	15.506				
38114*	92	13.266	15.264	38186	10	16.490	23.965	38283*	33	16.977	4.408	38355	29	1.054	16.833				
38115	8	14.550	15.926	38187	11	19.412	23.490	38284*	44	19.148	4.412	38356	13	4.484	16.300				
38116	12	15.036	15.766	38188*	45	20.074	23.122	38285	15	19.180	4.913	38357	13	7.792	16.462				
38117	14	15.706	15.236	38189*	80	20.436	23.836	38286	12	21.298	4.597	38358	8	10.266	16.734				
38118	16	22.142	15.384	38190	12	21.386	23.804	38287	24	24.732	4.510	38359	23	15.462	16.398				
38119	8	22.419	15.364	38191	33	22.029	23.708	38288	14	5.775	5.328	38360	12	20.010	16.140				
38120	15	0.616	16.194	38192	12	2.416	24.784	38289	9	15.840	5.700	38361	11	22.094	16.233				
38121	9	3.225	16.465	38193	14	8.254	24.813	38290	20	16.478	5.516	38362	11	22.744	16.350				
38122	24	8.106	16.220	38194	20	15.250	24.352	38291	12	18.040	5.222	38363*	37	22.918	16.642				
38123	24	11.790	16.402	38195	16	4.454	25.171	38292*	31	20.386	5.058	38364	14	0.884	17.268				
38124*	42	11.898	16.065	38196	10	6.536	25.097	38293	10	20.537	5.480	38365	19	8.720	17.480				
38125	14	14.074	16.268	38197	11	6.909	25.596	38294	8	21.819	5.897	38366	18	10.148	17.711				
38126	10	14.658	16.262	38198	13	9.125	25.475	38295	37	0.346	6.067	38367	29	14.738	17.254				
38127	24	18.085	16.040	38199	8	12.546	25.594	38296	10	14.673	6.350	38368	14	15.292	17.814				
38128	22	23.088	16.770	38200	13	12.804	25.104	38297	13	17.394	6.526	38369*	38	21.884	17.177				
38129*	28	4.206	17.342	38201	11	13.006	25.510	38298*	41	20.450	6.739	38370	22	22.746	17.420				
38130	15	7.006	17.921	38202	10	17.448	25.291	38299	15	22.358	6.042	38371	11	24.406	17.180				
38131	19	15.840	17.095	38203	11	20.107	25.092	38300	17	22.822	6.219	38372*	40	1.802	18.654				
38132	8	16.069	17.334					38301	12	0.624	7.248	38373*	32	5.234	18.340				
38133	13	18.544	17.708					38302	20	1.668	7.488	38374	31	12.436	18.944				
38134	9	19.590	17.400					38303	20	2.357	7.432	38375	20	22.019	18.810				
38135	22	21.208	17.934					38304	10	4.525	7.650	38376	16	25.570	18.988				
38136	13	22.912	17.200					38305	8	5.278	7.574	38377	49	25.898	18.521				
38137	11	23.786	17.236					38306*	32	10.582	7.521	38378	12	0.638	19.510				
38138	14	6.738	18.486					38307	13	14.080	7.988	38379	9	2.052	19.398				
38139	8	8.606	18.516					38308	24	15.014	7.362	38380*	30	3.349	19.337				
38140	12	10.470	18.360					38309	12	19.474	7.410	38381	15	4.255	19.938				
38141	11	13.014	18.402					38310	8	21.903	7.250	38382	12	11.950	19.222				
38142	14	15.406	18.052					38311*	44	7.964	8.775	38383	10	14.200	19.911				
38143	9	19.822	18.846					38312	8	15.121	8.842	38384	14	16.508	19.130				
38144	14	20.614	18.657					38313*	33	18.618	8.236	38385	10	16.897	19.693				
38145	20	21.286	18.939					38314	17	22.794	8.427	38386	9	18.964	19.576				
38146	23	21.967	18.328					38315	9	25.430	8.204	38387*	55	24.722	19.340				
38147*	38	23.820	18.600					38316	12	4.536	9.738	38388	15	1.550	20.838				
38148	10	1.862	19.838					38317	8	5.512	9.672	38389	9	3.788	20.630				
38149	12	2.280	19.451					38318	15	16.994	9.550	38390	28	6.547	20.892				
38150	12	5.168	19.862					38319	8	21.726	9.603	38391	10	16.742	20.904				
38151	11	13.078	19.886					38320	9	21.707	9.230	38392	15	17.169	20.650				
38152	12	15.350	19.446					38321	13	22.574	9.923	38393	9	17.753	20.527				
38153	19	15.690	19.943					38322	8	8.099	10.518	38394*	38	23.824	20.470				
38154	12	17.321	19.958					38323	11	18.253	10.051	38395	13	2.162	21.148				
38155	10	19.200	19.975					38324	10	18.270	10.921	38396	14	10.046	21.524				</



38473	8	23.296	3.384	38545*	36	6.368	17.018	38706	28	22.360	9.116	38778	35	16.184	24.231
38474	27	2.415	4.676	38546	14	7.724	17.452	38707*	37	6.054	10.910	38779	10	16.410	24.514
38475	27	8.662	4.424	38547	9	9.302	17.251	38708	9	16.378	10.124	38780	9	19.802	24.700
38476	14	12.558	4.570	38548*	41	11.867	17.422	38709	20	23.961	10.238	38781	16	10.147	25.874
38477*	31	16.156	4.708	38549	10	20.705	17.815	38710	22	24.110	10.460	38782	25	15.834	25.821
38478	18	21.849	4.851	38550*	52	3.734	18.672	38711	22	1.176	11.596	38783	36	25.640	25.624
38479	16	25.660	4.510	38551	14	6.240	18.100	38712	18	3.254	11.564				
38480	22	5.385	5.356	38552	12	8.225	18.669	38713	13	5.472	11.696				
38481*	31	8.000	5.501	38553	24	14.650	18.130	38714*	34	6.630	11.773				
38482*	36	20.022	5.360	38554	11	16.964	18.584	38715	35	16.265	11.921				
38483	16	0.054	6.232	38555	35	17.596	18.561	38716	10	19.151	11.522				
38484	15	0.522	6.405	38556	8	18.404	18.636	38717*	35	19.394	11.802				
38485*	22	4.526	6.928	38557*	60	2.563	19.506	38718*	45	20.709	11.920				
38486*	32	5.633	6.297	38558	16	3.411	19.144	38719	26	24.572	11.808				
38487*	53	7.439	6.110	38559	24	4.726	19.750	38720	13	24.774	11.975				
38488	10	8.062	6.050	38560	15	10.428	19.274	38721	32	25.500	11.534				
38489*	16	8.599	6.834	38561	14	10.482	19.210	38722	8	25.776	11.091				
38490	11	10.408	6.680	38562	10	14.992	19.522	38723	8	0.815	12.114				
38491	8	14.800	6.970	38563	10	19.844	19.602	38724	11	15.814	12.606				
38492	12	14.932	6.722	38564	11	20.925	19.052	38725	14	18.871	12.778				
38493	13	20.152	6.526	38565*	40	1.681	20.644	38726	13	19.156	12.049				
38494	17	4.996	7.801	38566	17	9.420	20.912	38727	20	19.464	12.804				
38495	10	5.934	7.345	38567*	27	11.256	20.679	38728*	65	9.900	13.626				
38496	13	6.364	7.972	38568	30	11.786	20.250	38729	8	13.704	13.494				
38497	13	9.316	7.284	38569	13	12.299	20.432	38730	29	21.340	13.694				
38498	8	9.964	7.807	38570	15	14.348	20.412	38731	24	21.474	13.612				
38499	8	14.482	7.906	38571	12	15.283	20.546	38732	13	21.636	13.871				
38500	16	0.518	8.614	38572	8	15.349	20.466	38733	19	23.084	13.538				
38501	10	5.076	8.827	38573*	35	23.467	20.230	38734	8	24.880	13.273				
38502	12	18.235	8.558	38574	13	4.612	21.630	38735*	26	13.023	14.714				
38503	23	17.172	9.734	38575	11	7.755	21.774	38736	13	13.768	14.675				
38504	10	18.880	9.836	38576	25	10.788	21.146	38737	10	15.014	14.644				
38505	11	18.910	9.828	38577*	34	12.548	21.180	38738	31	24.592	14.549				
38506	34	19.616	9.346	38578*	38	15.294	21.990	38739	27	9.960	15.481				
38507	8	20.136	9.258	38579	8	17.809	21.270	38740	29	10.470	15.202				
38508	16	22.987	9.246	38580*	33	18.148	21.994	38741*	57	13.464	15.024				
38509	8	24.180	9.598	38581*	33	20.504	21.490	38742	50	25.290	15.370				
38510	10	0.312	10.115	38582	10	21.086	21.312	38743*	37	2.172	16.458				
38511	8	1.956	10.514	38583	14	3.258	22.788	38744	8	3.576	16.772				
38512	24	13.719	10.554	38584	30	10.730	22.898	38745	11	3.878	16.348				
38513	8	18.880	10.574	38585	30	21.847	22.512	38746	12	23.340	16.770				
38514	10	19.438	10.650	38586	20	5.911	23.978	38747	8	1.048	17.328				
38515	8	21.826	10.439	38587	16	12.036	23.234	38748	19	16.038	17.500				
38516	13	15.350	11.764	38588	8	16.557	23.841	38749	10	19.330	17.804				
38517	14	15.642	11.150	38589	11	21.306	23.920	38750	13	4.835	18.456				
38518	13	20.730	11.779	38590	8	22.556	23.384	38751*	26	9.195	18.142				
38519	15	23.400	11.376	38591	12	0.220	24.344	38752	9	9.888	18.831				
38520	8	23.668	11.277	38592	33	5.901	24.965	38753	8	14.510	18.406				
38521	15	25.478	11.351	38593	8	6.676	24.308	38754*	35	20.404	18.162				
38522	31	1.226	12.224	38594	8	8.106	24.336	38755	8	20.474	18.918				
38523	9	10.906	12.751	38595	17	8.502	24.373	38756	14	23.270	18.908				
38524	29	12.094	12.594	38596	9	8.635	24.755	38757	8	1.136	19.815				
38525	12	13.744	12.096	38597*	41	12.544	24.850	38758*	60	4.965	19.082				
38526	10	0.208	13.596	38598	13	21.984	24.018	38759	13	14.998	19.912				
38527*	36	7.116	13.754	38599	15	8.217	25.945	38760*	28	15.067	19.003				
38528	8	10.902	13.935	38600	9	14.434	25.744	38761	10	25.156	19.598				
38529*	47	11.494	13.758					38762	35	25.722	19.222				
38530	10	6.130	14.766					38763*	37	1.285	20.452				
38531*	35	9.525	14.862					38764*	31	3.835	20.593				
38532	12	14.826	14.123					38765*	48	9.282	20.440				
38533	25	0.256	15.696					38766	12	16.118	20.775				
38534	10	10.275	15.865					38767	10	17.492	20.515				
38535	14	15.830	15.785					38768	9	4.456	21.551				
38536	11	17.736	15.880					38769	8	7.538	21.775				
38537	8	0.555	16.538					38770*	60	19.544	21.381				
38538*	37	0.730	16.828					38771*	35	10.766	22.724				
38539	8	12.856	16.571					38772*	45	15.314	22.430				
38540	8	13.133	16.367					38773	8	19.415	22.417				
38541*	34	13.418	16.524					38774*	35	21.251	22.420				
38542*	33	24.372	16.241					38775*	35	22.060	22.206				
38543	27	0.569	17.607					38776*	22	22.162	23.306				
38544	8	2.228	17.350					38777	23	8.476	24.930				

R.A. 12<sup>h</sup> 52<sup>m</sup>

Plate 1028; 1917 April 16.

Provisional Constants.

A B C  
 -0.2574 -0.0037 +0.0066  
 D E F  
 +0.0044 -0.2592 -1.081

Mag. = 16.1 - 1.09 √ d

No.	d	x	y
38651	8	1.284	0.556
38652	48	1.383	0.436
38653	9	5.734	0.482
38654	35	6.940	0.924
38655	10	9.256	0.802
38656	29	20.742	0.444
38657	10	21.482	0.900
38658	34	11.576	1.431
38659	13	19.178	1.476
38660	8	20.249	1.308
38661	30	20.848	1.091
38662	10	25.708	2.829
38663	9	1.031	3.606
38664	19	6.084	3.494
38665	9	6.611	3.567
38666*	35	9.688	3.344
38667	24	12.604	3.882
38668	31	22.472	3.581
38669	8	2.621	4.314
38670	23	3.403	4.720
38671	10	6.004	4.224
38672	26	8.074	4.326
38673	14	8.108	4.002
38674	22	10.425	4.554
38675	21	15.359	4.826
38676	8	16.100	4.738
38677	14	21.815	4.978
38678	28	22.778	4.726
38679	13	23.016	4.962
38680	18	5.116	5.934
38681	8	15.566	5.324
38682	13	22.306	5.222
38683	31	24.318	5.267
38684	9	10.972	6.634
38685	33	10.980	6.848
38686	10	13.680	6.205
38687	9	15.733	6.888
38688	12	17.012	6.101
38689	34	4.511	7.712
38690*	35	7.654	7.775
38691	12	12.166	7.956
38692	10	13.921	7.373
38693	13	15.725	7.846
38694	11	19.064	7.432
38695	8	19.438	7.287
38696*	35	14.404	8.454
38697	8	17.418	8.978
38698	12	19.115	8.322
38699	21	0.753	9.470
38700	16	8.324	9.436
38701	11	8.962	9.350
38702	8	9.842	9.956
38703	12	15.920	9.703
38704	8	20.819	9.232
38705	8	21.356	9.534



38843	21	10.750	8.046	38915	36	0.211	22.534	38978	12	10.324	4.144	39050	17	20.340	13.236	39122	32	2.038	23.788
38844	13	23.106	8.405	38916	14	9.784	22.551	38979	30	10.504	4.227	39051	12	21.066	13.846	39123	15	5.878	23.746
38845	22	0.251	9.438	38917	16	13.780	22.284	38980	33	10.849	4.112	39052	8	23.623	13.486	39124	10	12.450	23.994
38846	17	9.125	9.524	38918	12	22.689	22.689	38981	10	12.844	4.350	39053	12	1.895	14.148	39125	8	15.473	23.927
38847	11	14.736	9.802	38919	37	25.358	22.186	38982*	93	13.006	4.271	39054	10	11.212	14.985	39126	12	20.338	23.388
38848	13	15.213	9.150	38920	15	0.338	23.632	38983	11	16.240	4.677	39055	9	18.501	14.280	39127	32	24.507	23.988
38849	12	16.221	9.536	38921	16	5.482	23.400	38984	8	20.581	4.558	39056	31	24.048	14.760	39128	23	9.011	24.642
38850	19	1.876	10.530	38922	12	5.701	23.394	38985	18	21.148	4.420	39057	10	25.780	14.249	39129	9	10.207	24.300
38851	19	2.032	10.750	38923*	44	6.360	23.972	38986*	38	3.868	5.170	39058*	38	1.242	15.040	39130	16	13.204	24.757
38852	26	16.238	10.509	38924	18	7.294	23.916	38987	8	7.908	5.783	39059	9	1.911	15.332	39131	20	15.640	24.458
38853	12	17.176	10.026	38925*	34	8.258	23.289	38988	12	10.011	5.448	39060	9	3.785	15.471	39132	19	20.434	24.680
38854	21	21.824	10.363	38926	14	17.792	23.409	38989*	36	11.282	5.872	39061*	34	4.982	15.041	39133	8	23.624	24.466
38855	21	25.911	10.802	38927	13	24.042	23.171	38990*	52	17.968	5.365	39062*	23	12.552	15.132	39134	10	23.696	24.384
38856	22	3.441	11.798	38928	38	24.062	23.908	38991	28	18.986	5.097	39063	24	14.789	15.887	39135*	42	1.860	25.029
38857	22	5.471	11.861	38929	14	4.908	24.669	38992	21	5.238	6.484	39064	15	17.582	15.308	39136	19	6.632	25.558
38858	14	5.780	11.090	38930	22	14.544	24.200	38993	31	5.762	6.636	39065	22	22.026	15.664	39137	14	6.813	25.470
38859	13	8.800	11.770	38931	12	16.212	24.736	38994	8	9.511	6.447	39066	18	22.688	15.944	39138	39	8.330	25.952
38860	26	12.479	11.338	38932	19	17.378	24.777	38995	10	12.618	6.968	39067	10	0.656	16.327	39139	25	8.790	25.418
38861*	36	18.230	11.984	38933	15	3.474	25.716	38996	20	14.290	6.722	39068	22	6.320	16.163	39140	12	12.439	25.213
38862	13	22.611	11.364	38934	37	3.860	25.880	38997	10	16.243	6.840	39069	8	9.500	16.832	39141	15	13.308	25.122
38863	20	2.520	12.088	38935*	96	8.503	25.068	38998	17	16.873	6.004	39070	8	17.450	16.095	39142	12	14.376	25.626
38864	12	2.724	12.250	38936	15	16.464	25.744	38999*	30	17.194	6.714	39071	18	20.669	16.933	39143	16	16.393	25.396
38865	25	5.090	12.798	38937*	45	23.878	25.148	39000	25	17.952	6.320	39072	13	23.748	16.917	39144*	40	20.442	25.003
38866	14	13.627	12.802					39001	20	18.470	6.994	39073	16	6.467	17.568	39145	22	25.876	25.348
38867	18	1.064	13.848					39002	14	1.299	7.782	39074	13	10.770	17.210				
38868	15	19.582	13.038					39003	12	1.710	7.772	39075	8	12.899	17.572				
38869	15	20.202	13.588					39004	8	6.454	7.129	39076	29	13.898	17.600				
38870	25	2.593	14.827					39005	11	7.957	7.880	39077*	91	15.073	17.242				
38871*	39	7.665	14.456					39006	8	18.160	7.178	39078	12	17.602	17.869				
38872	12	17.655	14.459					39007	32	21.762	7.798	39079*	80	19.904	17.314				
38873*	56	3.302	15.634					39008	8	22.865	7.148	39080	14	24.774	17.708				
38874	11	5.626	15.639					39009	8	23.715	7.258	39081	23	25.665	17.570				
38875	14	13.650	15.806					39010	11	0.944	8.298	39082	18	25.968	17.464				
38876	15	17.390	15.500					39011	16	10.700	8.866	39083	19	4.714	18.060				
38877*	40	23.342	15.154					39012	11	11.323	8.419	39084	9	8.762	18.468				
38878	13	25.881	15.608					39013	11	11.606	8.310	39085	10	17.183	18.995				
38879	13	7.218	16.417					39014	8	17.776	8.250	39086	20	17.358	18.780				
38880	13	9.146	16.074					39015*	39	17.912	8.683	39087	29	18.103	18.691				
38881	19	12.073	16.512					39016	14	23.732	8.897	39088	13	22.012	18.276				
38882	12	15.684	16.088					39017	17	5.892	9.156	39089	31	22.050	18.983				
38883*	36	19.894	16.396					39018*	24	7.676	9.902	39090	9	25.042	18.160				
38884	14	22.744	16.434					39019	9	8.593	9.152	39091	13	1.325	19.364				
38885	17	1.388	17.074					39020	8	10.878	9.632	39092*	64	2.198	19.507				
38886*	30	5.556	17.075					39021	8	13.110	9.184	39093	18	3.302	19.178				
38887	16	17.626	17.674					39022	23	19.352	9.786	39094	18	4.542	19.506				
38888*	20	4.640	18.791					39023	9	21.162	9.475	39095	14	9.216	19.630				
38889	20	13.339	18.205					39024	12	22.992	9.090	39096	12	10.630	19.304				
38890*	46	15.772	18.881					39025	18	3.770	10.668	39097	13	12.264	19.494				
38891	12	17.850	18.650					39026	8	5.718	10.710	39098	13	24.556	19.548				
38892	16	1.358	19.212					39027	12	5.778	10.478	39099	11	25.092	19.660				
38893	15	3.258	19.863					39028	25	7.720	10.218	39100	17	25.927	19.207				
38894*	32	3.815	19.476					39029	9	22.086	10.039	39101	11	1.242	20.386				
38895	18	5.023	19.756					39030	12	4.573	11.597	39102	9	6.166	20.078				
38896*	48	17.562	19.834					39031	18	7.086	11.048	39103	10	6.932	20.866				
38897	14	21.820	19.078					39032	13	7.732	11.268	39104	9	9.894	20.558				
38898	17	23.386	19.476					39033	12	9.421	11.484	39105	14	11.547	20.792				
38899*	66	24.266	19.626					39034*	35	10.982	11.526	39106	8	12.977	20.831				
38900	18	25.371	19.308					39035	19	19.430	11.980	39107*	28	13.872	20.634				
38901*	33	6.422	20.364					39036	11	21.382	11.710	39108	10	16.824	20.369				
38902	17	8.650	20.895					39037	13	24.874	11.254	39109	9	17.746	20.866				
38903*	28	15.000	20.798					39038*	32	6.198	12.142	39110	10	2.464	21.450				
38904	13	23.522	20.262					39039	22	9.230	12.910	39111*	32	3.244	21.045				
38905	13	4.612	21.745					39040	11	12.558	12.712	39112	24	7.760	21.688				
38906	20	7.318	21.976					39041	15	13.178	12.249	39113	9	8.811	21.776				
38907	18	16.132	21.621					39042	8	14.394	12.356	39114	12	11.279	21.064				
38908	13	17.541	21.846					39043	11	14.918	12.776	39115*	33	12.834	21.188				
38909	19	17.606	21.744					39044	14	19.422	12.652	39116	18	15.654	21.292				
38910*	26	18.706	21.258					39045	20	23.917	12.560	39117	9	0.656	22.578				
38911	14	19.273	21.660					39046	13	12.638	13.812	39118*	32	3.319	22.058				
38912	13	20.986	21.408					39047	17	17.903	13.062	39119	19	10.248	22.812				
38913	16	24.510	21.575					39048	8	18.525	13.765	39120	9	12.503	22.352				
38914*	36	25.294	21.174					39049	25	19.526	13.460	39121	10	20.178	22.768				

R.A. 13<sup>h</sup> 8<sup>m</sup>

Plate 1020; 1917 March 21.

Provisional Constants.

A	B</
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39177	14	9.456	4.180	39249	13	4.645	17.010	39305	44	17.174	0.850	39377	10	9.284	14.964	<b>R.A. 13<sup>h</sup> 32<sup>m</sup></b> Plate 1039; 1917 April 20. <i>Provisional Constants.</i> A            B            C -0.02591 +0.00415 +0.0986 D            E            F -0.00463 -0.02614 -0.1468 Mag.=16.5-1.09√d
39178	35	9.746	4.366	39250	9	19.352	17.383	39306	44	24.081	0.808	39378	29	12.880	14.890	
39179	16	17.438	4.838	39251	14	19.770	17.842	39307	9	25.694	0.530	39379	15	0.018	15.102	
39180	20	19.035	4.862	39252	11	0.070	18.376	39308	33	2.246	1.720	39380	8	8.974	15.900	
39181	10	24.456	4.224	39253*	78	6.550	18.096	39309	9	12.838	1.287	39381	8	9.131	15.851	No.    d    x    y 39451    62    1.918    0.820 39452    15    3.536    0.526 39453    12    3.606    0.486 39454    11    11.762    0.342 39455    15    15.000    0.016 39456    10    16.114    0.358 39457    37    22.210    0.803 39458    10    0.069    1.568 39459    11    0.425    1.944 39460    17    2.882    1.396 39461    10    6.459    1.920 39462    18    11.144    1.418 39463    12    13.032    1.154 39464    9    15.806    1.744 39465    21    19.496    1.692 39466    14    21.320    1.890 39467    11    21.463    1.548 39468    13    21.564    1.108 39469    15    21.788    1.650 39470    67    24.748    1.307 39471    14    10.100    2.811 39472    13    16.958    2.730 39473    24    18.266    2.746 39474    16    21.136    2.452 39475    14    23.686    2.893 39476    10    8.697    3.238 39477    28    9.021    3.195 39478    17    9.179    3.749 39479    11    10.648    3.472 39480    10    24.256    3.473 39481    33    0.082    4.105 39482    12    1.190    4.800 39483    27    4.963    4.704 39484    10    6.302    4.334 39485    9    6.404    4.688 39486    12    9.980    4.306 39487    12    18.726    4.954 39488    14    18.914    4.047 39489    24    2.197    5.638 39490    13    5.614    5.976 39491    26    12.386    5.380 39492    30    12.966    5.140 39493    40    20.806    5.920 39494    11    24.492    5.072 39495    12    25.573    5.258 39496    10    25.942    5.638 39497    32    5.074    6.478 39498    15    5.130    6.100 39499    18    9.135    6.796 39500    9    9.498    6.662 39501    10    14.250    6.944 39502*    78    25.132    6.358 39503    23    0.285    7.118 39504    14    4.289    7.440 39505*    62    4.367    7.783
39182	12	3.078	5.583	39254	9	7.750	18.436	39310	10	17.288	1.824	39382	11	12.361	15.230	
39183	12	7.659	5.836	39255	15	10.120	18.740	39311	8	22.222	1.534	39383	8	12.646	15.255	
39184	20	17.120	5.302	39256	24	10.329	18.356	39312	9	25.036	1.395	39384	10	15.632	15.093	
39185	16	17.136	5.290	39257	21	18.454	18.394	39313	10	4.374	2.328	39385	9	19.155	15.242	No.    d    x    y 39451    62    1.918    0.820 39452    15    3.536    0.526 39453    12    3.606    0.486 39454    11    11.762    0.342 39455    15    15.000    0.016 39456    10    16.114    0.358 39457    37    22.210    0.803 39458    10    0.069    1.568 39459    11    0.425    1.944 39460    17    2.882    1.396 39461    10    6.459    1.920 39462    18    11.144    1.418 39463    12    13.032    1.154 39464    9    15.806    1.744 39465    21    19.496    1.692 39466    14    21.320    1.890 39467    11    21.463    1.548 39468    13    21.564    1.108 39469    15    21.788    1.650 39470    67    24.748    1.307 39471    14    10.100    2.811 39472    13    16.958    2.730 39473    24    18.266    2.746 39474    16    21.136    2.452 39475    14    23.686    2.893 39476    10    8.697    3.238 39477    28    9.021    3.195 39478    17    9.179    3.749 39479    11    10.648    3.472 39480    10    24.256    3.473 39481    33    0.082    4.105 39482    12    1.190    4.800 39483    27    4.963    4.704 39484    10    6.302    4.334 39485    9    6.404    4.688 39486    12    9.980    4.306 39487    12    18.726    4.954 39488    14    18.914    4.047 39489    24    2.197    5.638 39490    13    5.614    5.976 39491    26    12.386    5.380 39492    30    12.966    5.140 39493    40    20.806    5.920 39494    11    24.492    5.072 39495    12    25.573    5.258 39496    10    25.942    5.638 39497    32    5.074    6.478 39498    15    5.130    6.100 39499    18    9.135    6.796 39500    9    9.498    6.662 39501    10    14.250    6.944 39502*    78    25.132    6.358 39503    23    0.285    7.118 39504    14    4.289    7.440 39505*    62    4.367    7.783
39186	10	18.150	5.473	39258	14	21.126	18.581	39314	18	6.026	2.526	39386	29	22.283	15.900	
39187	16	4.441	6.670	39259	26	0.118	19.082	39315*	35	6.350	2.917	39387	19	0.758	16.451	
39188	8	15.366	6.192	39260	14	2.632	19.612	39316	11	13.758	2.085	39388*	40	3.160	16.100	
39189	22	17.142	6.848	39261	11	3.170	19.719	39317	8	23.254	2.279	39389	17	9.398	16.074	No.    d    x    y 39451    62    1.918    0.820 39452    15    3.536    0.526 39453    12    3.606    0.486 39454    11    11.762    0.342 39455    15    15.000    0.016 39456    10    16.114    0.358 39457    37    22.210    0.803 39458    10    0.069    1.568 39459    11    0.425    1.944 39460    17    2.882    1.396 39461    10    6.459    1.920 39462    18    11.144    1.418 39463    12    13.032    1.154 39464    9    15.806    1.744 39465    21    19.496    1.692 39466    14    21.320    1.890 39467    11    21.463    1.548 39468    13    21.564    1.108 39469    15    21.788    1.650 39470    67    24.748    1.307 39471    14    10.100    2.811 39472    13    16.958    2.730 39473    24    18.266    2.746 39474    16    21.136    2.452 39475    14    23.686    2.893 39476    10    8.697    3.238 39477    28    9.021    3.195 39478    17    9.179    3.749 39479    11    10.648    3.472 39480    10    24.256    3.473 39481    33    0.082    4.105 39482    12    1.190    4.800 39483    27    4.963    4.704 39484    10    6.302    4.334 39485    9    6.404    4.688 39486    12    9.980    4.306 39487    12    18.726    4.954 39488    14    18.914    4.047 39489    24    2.197    5.638 39490    13    5.614    5.976 39491    26    12.386    5.380 39492    30    12.966    5.140 39493    40    20.806    5.920 39494    11    24.492    5.072 39495    12    25.573    5.258 39496    10    25.942    5.638 39497    32    5.074    6.478 39498    15    5.130    6.100 39499    18    9.135    6.796 39500    9    9.498    6.662 39501    10    14.250    6.944 39502*    78    25.132    6.358 39503    23    0.285    7.118 39504    14    4.289    7.440 39505*    62    4.367    7.783
39190	18	23.088	6.098	39262	12	4.002	19.252	39318*	52	12.925	3.335	39390	19	16.912	16.781	
39191	10	24.204	6.326	39263*	38	16.326	19.606	39319	13	18.296	3.480	39391	8	22.934	16.536	
39192	25	4.238	7.406	39264	20	14.967	20.002	39320*	85	20.056	3.329	39392	11	23.126	16.616	
39193	21	7.150	7.893	39265	8	16.320	20.622	39321	9	23.362	3.795	39393	10	5.038	17.966	No.    d    x    y 39451    62    1.918    0.820 39452    15    3.536    0.526 39453    12    3.606    0.486 39454    11    11.762    0.342 39455    15    15.000    0.016 39456    10    16.114    0.358 39457    37    22.210    0.803 39458    10    0.069    1.568 39459    11    0.425    1.944 39460    17    2.882    1.396 39461    10    6.459    1.920 39462    18    11.144    1.418 39463    12    13.032    1.154 39464    9    15.806    1.744 39465    21    19.496    1.692 39466    14    21.320    1.890 39467    11    21.463    1.548 39468    13    21.564    1.108 39469    15    21.788    1.650 39470    67    24.748    1.307 39471    14    10.100    2.811 39472    13    16.958    2.730 39473    24    18.266    2.746 39474    16    21.136    2.452 39475    14    23.686    2.893 39476    10    8.697    3.238 39477    28    9.021    3.195 39478    17    9.179    3.749 39479    11    10.648    3.472 39480    10    24.256    3.473 39481    33    0.082    4.105 39482    12    1.190    4.800 39483    27    4.963    4.704 39484    10    6.302    4.334 39485    9    6.404    4.688 39486    12    9.980    4.306 39487    12    18.726    4.954 39488    14    18.914    4.047 39489    24    2.197    5.638 39490    13    5.614    5.976 39491    26    12.386    5.380 39492    30    12.966    5.140 39493    40    20.806    5.920 39494    11    24.492    5.072 39495    12    25.573    5.258 39496    10    25.942    5.638 39497    32    5.074    6.478 39498    15    5.130    6.100 39499    18    9.135    6.796 39500    9    9.498    6.662 39501    10    14.250    6.944 39502*    78    25.132    6.358 39503    23    0.285    7.118 39504    14    4.289    7.440 39505*    62    4.367    7.783
39194	11	9.718	7.366	39266*	42	24.310	20.099	39322	8	2.124	4.476	39394	14	6.182	17.290	
39195	14	11.562	7.977	39267	15	15.298	21.552	39323	17	6.184	4.917	39395	11	21.185	17.068	
39196*	34	25.148	7.574	39268	16	18.062	21.394	39324	12	10.471	4.652	39396	8	10.170	18.016	
39197	24	25.396	7.437	39269	8	25.826	21.916	39325	21	13.784	4.650	39397	12	10.798	18.092	No.    d    x    y 39451    62    1.918    0.820 39452    15    3.536    0.526 39453    12    3.606    0.486 39454    11    11.762    0.342 39455    15    15.000    0.016 39456    10    16.114    0.358 39457    37    22.210    0.803 39458    10    0.069    1.568 39459    11    0.425    1.944 39460    17    2.882    1.396 39461    10    6.459    1.920 39462    18    11.144    1.418 39463    12    13.032    1.154 39464    9    15.806    1.744 39465    21    19.496    1.692 39466    14    21.320    1.890 39467    11    21.463    1.548 39468    13    21.564    1.108 39469    15    21.788    1.650 39470    67    24.748    1.307 39471    14    10.100    2.811 39472    13    16.958    2.730 39473    24    18.266    2.746 39474    16    21.136    2.452 39475    14    23.686    2.893 39476    10    8.697    3.238 39477    28    9.021    3.195 39478    17    9.179    3.749 39479    11    10.648    3.472 39480    10    24.256    3.473 39481    33    0.082    4.105 39482    12    1.190    4.800 39483    27    4.963    4.704 39484    10    6.302    4.334 39485    9    6.404    4.688 39486    12    9.980    4.306 39487    12    18.726    4.954 39488    14    18.914    4.047 39489    24    2.197    5.638 39490    13    5.614    5.976 39491    26    12.386    5.380 39492    30    12.966    5.140 39493    40    20.806    5.920 39494    11    24.492    5.072 39495    12    25.573    5.258 39496    10    25.942    5.638 39497    32    5.074    6.478 39498    15    5.130    6.100 39499    18    9.135    6.796 39



39506	14	5.784	7.318	39578	14	20.407	19.769	39654	14	15.450	0.586	39726	18	2.857	11.506	39798	13	24.859	21.650
39507	26	8.900	7.610	39579	13	20.486	19.104	39655	16	16.954	0.022	39727*	36	4.420	11.240	39799	25	1.712	22.501
39508	16	15.212	7.297	39580	20	2.276	20.453	39656	34	20.212	0.991	39728	14	9.042	11.842	39800	16	2.300	22.640
39509	10	19.845	7.039	39581	23	5.424	20.292	39657	22	20.546	0.558	39729	20	10.115	11.934	39801	22	5.566	22.472
39510	18	23.500	7.573	39582	29	8.645	20.268	39658	12	2.138	1.581	39730	16	12.723	11.894	39802	15	9.266	22.546
39511*	63	14.830	8.708	39583	17	10.980	20.298	39659	54	2.498	1.370	39731	13	16.568	11.198	39803	25	10.454	22.434
39512*	44	15.682	8.672	39584*	45	13.888	20.120	39660	12	3.450	1.040	39732	9	17.540	11.713	39804	25	12.682	22.928
39513	29	19.976	8.006	39585	17	20.084	20.870	39661	21	8.465	1.154	39733	11	21.482	11.900	39805*	38	18.601	22.605
39514	40	20.594	8.952	39586	23	20.780	20.243	39662	16	12.528	1.018	39734	11	22.915	11.969	39806*	53	18.937	22.064
39515	17	21.740	8.269	39587	12	25.868	20.700	39663	37	14.544	1.266	39735	14	25.007	11.346	39807	13	22.676	22.455
39516*	48	24.712	8.134	39588	8	25.964	20.484	39664	17	18.850	1.364	39736	13	1.388	12.064	39808	14	25.307	22.296
39517*	45	0.681	9.504	39589	10	4.576	21.218	39665*	47	19.670	1.574	39737	13	8.458	12.384	39809	24	3.726	23.908
39518	10	12.037	9.092	39590	13	7.204	21.562	39666	18	1.459	2.975	39738	19	8.859	12.856	39810	15	10.450	23.309
39519	20	14.392	9.616	39591	10	20.690	21.371	39667	12	3.866	2.026	39739	10	10.409	12.228	39811	16	19.403	23.590
39520	13	14.502	9.959	39592	10	0.222	22.438	39668	36	4.690	2.661	39740	18	20.304	12.158	39812	13	5.696	24.852
39521	21	15.272	9.248	39593	23	1.144	22.605	39669	22	7.504	2.640	39741	13	25.458	12.406	39813	14	11.190	24.857
39522	14	19.419	9.446	39594	9	5.318	22.074	39670	38	16.065	2.261	39742	14	7.346	13.124	39814	17	11.842	24.454
39523	40	20.004	9.182	39595	12	5.373	22.377	39671	12	20.192	2.858	39743	21	10.050	13.618	39815	15	12.008	24.514
39524	10	20.916	9.370	39596	23	7.885	22.570	39672	19	21.120	2.902	39744	13	10.119	13.410	39816	18	12.432	24.384
39525	25	23.182	9.736	39597	23	23.704	22.426	39673	12	24.067	2.604	39745	16	11.624	13.789	39817	24	14.336	24.958
39526	11	24.590	9.234	39598	14	24.286	22.574	39674	11	2.031	3.542	39746	16	23.916	13.045	39818	12	17.028	24.764
39527	10	8.542	10.847	39599*	49	4.507	23.570	39675	13	11.222	3.220	39747	13	5.251	14.011	39819	28	19.808	24.223
39528	25	9.216	10.062	39600	14	4.723	23.550	39676	14	25.572	3.882	39748	18	7.066	14.398	39820	44	20.622	24.342
39529	8	9.586	10.478	39601*	37	6.562	23.326	39677	26	4.450	4.050	39749	22	1.260	15.856	39821	19	21.818	24.748
39530	12	13.940	10.844	39602	12	6.748	23.160	39678	19	9.794	4.818	39750	33	3.760	15.966	39822	26	23.916	24.028
39531	15	2.578	11.834	39603	25	10.735	23.098	39679	15	15.030	4.809	39751	13	3.970	15.972	39823	15	25.324	24.360
39532	21	6.269	11.140	39604	12	11.010	23.311	39680	18	17.664	4.519	39752	16	6.648	15.025	39824	10	4.782	25.242
39533	10	11.220	11.214	39605	12	13.018	23.821	39681	13	3.370	5.314	39753	17	8.864	15.430	39825	16	15.348	25.240
39534	31	12.644	11.954	39606	13	15.177	23.424	39682	17	3.746	5.689	39754*	36	11.832	15.068	39826	18	18.216	25.798
39535	34	15.830	11.850	39607*	41	15.259	23.170	39683	11	3.755	5.033	39755	22	15.102	15.299	39827	11	22.246	25.758
39536	12	18.933	11.677	39608	10	19.082	23.962	39684	33	5.430	5.238	39756	15	22.532	15.770				
39537	13	23.503	11.984	39609	23	25.694	23.861	39685	18	5.480	5.518	39757	22	24.328	15.058				
39538	22	24.982	11.443	39610	19	0.376	24.970	39686	12	6.705	5.294	39758	12	6.612	16.826				
39539	15	6.822	12.358	39611	11	4.804	24.339	39687	13	7.518	5.011	39759	16	8.596	16.100				
39540	19	11.292	12.784	39612	13	9.533	24.736	39688	16	7.700	5.166	39760	17	18.032	16.396				
39541	9	14.944	12.980	39613	10	15.502	24.700	39689	18	8.484	5.360	39761	13	18.134	16.626				
39542	11	4.127	13.840	39614	11	16.209	24.014	39690	20	11.070	5.298	39762	16	19.960	16.911				
39543	12	5.876	13.216	39615	15	17.436	24.325	39691	16	14.946	5.269	39763	30	23.897	16.818				
39544*	14	10.245	13.379	39616	10	21.110	24.134	39692	17	16.542	5.438	39764	20	25.888	16.076				
39545*	43	12.922	13.758	39617	48	1.983	25.471	39693*	64	2.939	6.419	39765	14	2.269	17.994				
39546*	45	17.545	13.867	39618	11	7.598	25.669	39694	19	8.568	6.524	39766*	31	6.124	17.228				
39547	22	21.750	13.128	39619	18	8.766	25.138	39695	16	12.894	6.260	39767	11	10.556	17.764				
39548	40	8.511	14.874	39620	10	12.264	25.839	39696	14	20.258	6.188	39768	21	11.640	17.300				
39549	13	10.012	14.455	39621	15	16.018	25.744	39697	12	20.546	6.835	39769	20	11.650	17.232				
39550	11	11.410	14.372	39622	11	19.182	25.496	39698	13	22.580	6.693	39770*	40	16.976	17.556				
39551*	37	17.700	14.800					39699	19	1.324	7.654	39771	12	7.427	18.044				
39552	30	18.802	14.490					39700	17	6.695	7.449	39772	16	7.801	18.992				
39553	10	20.881	14.436					39701	12	11.179	7.662	39773	14	9.935	18.914				
39554	32	0.268	15.924					39702*	36	11.469	7.922	39774	13	19.844	18.039				
39555	12	7.772	15.540					39703*	39	2.546	8.197	39775	16	22.660	18.986				
39556	13	14.805	15.244					39704	27	4.264	8.475	39776*	36	24.322	18.581				
39557	26	14.854	15.098					39705	11	6.256	8.583	39777	15	24.616	18.712				
39558	27	23.331	15.775					39706	32	15.205	8.937	39778	17	9.842	19.552				
39559	38	25.832	15.914					39707	12	15.524	8.453	39779	11	12.332	19.587				
39560	12	1.115	16.636					39708*	34	22.137	8.144	39780	16	18.360	19.050				
39561	11	2.706	16.913					39709	19	24.004	8.754	39781	16	25.234	19.986				
39562	26	7.803	16.184					39710	22	1.035	9.818	39782	11	0.527	20.503				
39563	14	11.774	16.334					39711	14	5.391	9.668	39783	12	3.164	20.134				
39564	12	12.224	16.412					39712	17	6.799	9.458	39784	15	3.856	20.746				
39565	22	12.900	16.026					39713	17	11.770	9.435	39785	20	5.258	20.828				
39566*	40	16.990	16.576					39714*	86	17.706	9.556	39786	16	9.102	20.708				
39567	23	21.767	16.842					39715	19	24.954	9.631	39787	13	11.360	20.824				
39568	12	17.872	17.426					39716	22	3.916	10.912	39788	14	16.386	20.348				
39569	12	18.044	17.936					39717	11	7.560	10.867	39789	12	18.980	20.503				
39570	12	19.705	17.601					39718*	39	12.642	10.452	39790	12	21.617	20.156				
39571	9	22.948	17.438					39719	15	15.942	10.672	39791	19	13.792	21.863				
39572	19	24.314	17.926					39720	11	15.970	10.114	39792	18	14.072	21.866				
39573*	76	1.156	18.118					39721*	36	18.045	10.533	39793*	44	17.838	21.624				
39574	25	1.934	18.614					39722	17	19.466	10.222	39794	16	19.275	21.475				
39575	25	16.390	18.426					39723	15	2									



39869	21	21.354	2.726	39941	10	23.342	13.539	40013	10	14.752	22.337	40112	15	4.136	2.672	40184	12	12.622	11.981
39870	17	21.388	2.590	39942	19	24.752	13.333	40014	9	14.758	22.118	40113*	60	5.885	2.432	40185	12	13.852	11.652
39871	11	21.695	2.998	39943	8	3.479	14.086	40015	13	16.144	22.266	40114	25	7.724	2.181	40186	10	14.558	11.036
39872	10	5.780	3.097	39944	8	22.366	14.458	40016*	34	17.902	22.500	40115	8	10.380	2.222	40187	9	16.403	11.124
39873	12	5.908	3.811	39945	8	23.924	14.101	40017	12	20.158	22.500	40116	8	15.094	2.193	40188	18	23.706	11.320
39874	10	6.905	3.214	39946	19	24.450	14.754	40018	9	20.661	22.546	40117	16	18.619	2.953	40189	10	25.846	11.634
39875	10	9.984	3.356	39947	19	2.335	15.324	40019	20	24.161	22.603	40118	17	19.090	2.184	40190	15	6.280	12.778
39876*	55	10.609	3.415	39948	12	5.620	15.608	40020	10	0.061	23.824	40119	24	22.724	2.112	40191	12	14.300	12.026
39877*	36	11.089	3.000	39949	14	11.375	15.294	40021	9	8.714	23.924	40120	15	2.921	3.307	40192	18	16.200	12.902
39878	17	11.486	3.048	39950	13	23.498	15.233	40022	11	9.144	23.270	40121*	40	3.194	3.423	40193	24	16.761	12.622
39879	12	12.512	3.703	39951	10	25.050	15.038	40023	8	12.910	23.051	40122*	47	10.089	3.027	40194	20	23.618	12.656
39880	19	16.544	3.738	39952	19	25.173	15.455	40024	8	15.156	23.231	40123	18	10.782	3.992	40195	22	2.414	13.370
39881	12	25.384	3.280	39953	11	0.550	16.060	40025	10	16.047	23.968	40124	9	11.779	3.730	40196	8	3.451	13.682
39882	32	25.657	3.396	39954	18	3.909	16.321	40026	18	18.571	23.548	40125	15	14.774	3.199	40197	21	10.696	13.048
39883	11	3.440	4.134	39955	10	4.380	16.980	40027	12	18.850	23.460	40126	10	16.451	3.537	40198	11	11.836	13.535
39884	10	4.244	4.351	39956	9	5.633	16.033	40028	15	21.386	23.205	40127	32	16.804	3.616	40199	10	14.960	13.613
39885	9	9.091	4.165	39957	9	6.492	16.114	40029	31	2.037	24.301	40128*	25	17.448	3.260	40200	22	17.676	13.968
39886	8	16.071	4.718	39958	8	8.087	16.812	40030	11	3.452	24.614	40129	11	18.472	3.126	40201	10	18.169	13.113
39887	9	4.998	5.150	39959	19	10.300	16.292	40031	9	4.480	24.678	40130	12	1.551	4.738	40202	20	24.526	13.338
39888	8	21.043	5.245	39960	17	15.113	16.448	40032	9	10.316	24.217	40131	11	1.918	4.850	40203	13	24.745	13.394
39889	10	21.056	6.772	39961	24	20.958	16.788	40033	15	10.513	24.036	40132	11	3.498	4.070	40204	9	1.596	14.148
39890	8	22.204	6.598	39962	13	22.000	16.420	40034	17	10.574	24.384	40133	21	12.534	4.524	40205	20	2.130	14.792
39891	9	24.911	6.330	39963	12	25.074	16.614	40035	12	11.356	24.702	40134	11	14.282	4.111	40206	9	6.096	14.783
39892	14	25.054	6.164	39964	30	1.925	17.090	40036	15	13.194	24.781	40135	25	16.244	4.844	40207	24	7.671	14.154
39893	25	9.486	7.488	39965*	78	4.948	17.352	40037	9	18.799	24.490	40136	30	18.426	4.258	40208*	50	11.002	14.926
39894	10	24.105	7.840	39966	9	5.169	17.154	40038	11	19.219	24.370	40137	12	20.734	4.963	40209	9	21.228	14.454
39895	32	0.056	8.437	39967*	27	8.850	17.480	40039	22	21.477	24.190	40138	26	22.350	4.404	40210	14	23.850	14.256
39896	9	6.372	8.137	39968	25	8.884	17.518	40040	8	25.134	24.401	40139	24	22.421	4.692	40211	37	24.360	14.094
39897	10	6.750	8.090	39969	19	11.098	17.149	40041	8	25.602	24.163	40140	29	25.000	4.024	40212	15	1.184	15.284
39898	9	7.957	8.822	39970	10	12.533	17.458	40042*	34	5.344	25.216	40141	33	5.715	5.548	40213	8	1.834	15.624
39899	8	8.530	8.456	39971	8	15.600	17.882	40043	9	9.610	25.370	40142	28	7.374	5.635	40214	11	2.732	15.068
39900*	49	14.196	8.772	39972	13	22.752	17.778	40044	8	11.216	25.433	40143	18	16.950	5.074	40215	21	2.860	15.484
39901	18	1.932	9.028	39973*	35	2.372	18.849	40045	12	16.361	25.244	40144	12	2.486	6.366	40216*	38	7.078	15.101
39902	14	2.894	9.891	39974	13	2.671	18.977	40046	10	17.263	25.645	40145	20	2.624	6.198	40217	11	12.766	15.129
39903	14	15.733	9.678	39975	12	6.274	18.107	40047	20	19.807	25.208	40146	8	7.649	6.118	40218	17	15.378	15.118
39904*	64	17.196	9.350	39976	8	9.404	18.128	40048	20	22.764	25.960	40147	24	9.620	6.884	40219	8	17.482	15.350
39905	14	18.487	9.530	39977	12	10.219	18.912	40049	11	22.976	25.570	40148	10	12.626	6.892	40220	9	2.778	16.645
39906*	40	21.187	9.538	39978	10	11.567	18.807					40149	11	12.700	6.644	40221*	76	15.570	16.282
39907	19	23.122	9.168	39979*	25	12.770	18.621					40150	18	13.474	6.998	40222	17	16.787	16.264
39908	10	0.222	10.722	39980	22	15.571	18.500					40151	10	16.484	6.280	40223	15	20.567	16.701
39909*	31	3.717	10.972	39981	12	21.722	18.210					40152	18	18.839	6.771	40224	31	20.808	16.070
39910	10	5.804	10.946	39982	8	24.512	18.248					40153	26	22.414	6.209	40225	12	22.481	16.966
39911	9	11.262	10.196	39983	11	0.718	19.272					40154	8	23.976	6.334	40226	17	0.470	17.835
39912*	40	17.382	10.620	39984	14	5.136	19.638					40155	18	25.674	6.945	40227	13	10.221	17.420
39913	21	17.542	10.037	39985	9	11.251	19.529					40156	10	1.698	7.884	40228	11	14.685	17.195
39914	9	19.186	10.408	39986	20	11.566	19.786					40157	36	13.526	7.927	40229	14	18.221	17.762
39915	13	23.103	10.777	39987	14	16.776	19.370					40158	12	19.752	7.986	40230*	51	18.674	17.803
39916	9	23.813	10.630	39988	20	17.912	19.280					40159	21	19.840	7.369	40231	12	21.917	17.268
39917	13	1.670	11.210	39989*	35	18.200	19.927					40160	26	21.994	7.967	40232	16	23.572	17.555
39918	16	2.970	11.607	39990*	32	22.731	19.828					40161	24	22.996	7.198	40233	31	9.362	18.616
39919*	44	4.646	11.644	39991	13	3.303	20.245					40162	13	4.204	8.856	40234	21	9.431	18.218
39920	10	6.282	11.120	39992	8	7.276	20.682					40163	23	5.566	8.900	40235	9	10.036	18.574
39921	8	12.197	11.941	39993	13	8.458	20.127					40164	9	10.326	8.890	40236	9	18.056	18.218
39922	9	21.350	11.700	39994	10	9.268	20.127					40165	16	15.291	8.037	40237	10	19.645	18.046
39923	12	25.194	11.027	39995*	26	12.631	20.773					40166	24	17.876	8.254	40238	30	20.413	18.768
39924	8	25.608	11.558	39996	27	15.696	20.364					40167	22	19.654	8.360	40239	8	21.594	18.264
39925	10	3.139	12.400	39997	11	17.868	20.439					40168	28	21.346	8.590	40240	38	25.586	18.335
39926	10	3.436	12.658	39998	11	23.142	20.604					40169	15	22.500	8.354	40241*	40	0.472	19.888
39927	16	4.412	12.600	39999	9	25.774	20.613					40170	21	0.731	9.222	40242	22	4.049	19.560
39928	9	5.052	12.369	40000	15	2.090	21.730					40171	23	5.124	9.827	40243*	42	5.810	19.064
39929	11	18.082	12.484	40001	25	2.144	21.322					40172	25	6.781	9.541	40244	10	9.784	19.497
39930	10	18.686	12.234	40002	14	2.374	21.339					40173	22	10.150	9.814	40245	13	0.895	20.658
39931	13	1.900	13.320	40003	15	6.520	21.818					40174	20	20.589	9.416	40246	9	3.527	20.635
39932	13	4.217	13.124	40004	11	7.344	21.442					40175	18	0.734	10.833	40247	9	8.486	20.162
39933	9	14.522	13.874	40005	19	7.608	21.655					40176	20	10.979	10.017	40248	20	15.362	20.890
39934	14	15.360	13.352	40006	9	11.677	21.580					40177	8	15.626	10.392	40249	8		



40256	12	0.633	21.904	40311	26	13.612	1.084	40383*	47	11.286	9.748	40455	10	19.127	18.224
40257	14	4.059	21.972	40312	17	0.511	2.261	40384	9	13.214	9.198	40456	8	2.214	19.313
40258	8	4.630	21.056	40313	12	11.967	2.057	40385	27	16.692	9.305	40457	10	3.282	19.695
40259	12	4.960	21.622	40314	13	12.096	2.541	40386	38	21.220	9.411	40458*	40	4.456	19.484
40260	15	5.408	21.435	40315	12	21.069	2.606	40387	8	25.308	9.094	40459	15	6.519	19.224
40261	10	8.072	21.930	40316	10	8.644	3.105	40388	23	4.821	10.908	40460	8	11.422	19.262
40262	9	10.354	21.236	40317	8	10.146	3.398	40389*	43	6.188	10.240	40461	25	14.984	19.196
40263	12	20.326	21.326	40318	11	10.311	3.045	40390	10	10.510	10.344	40462	12	0.230	20.622
40264	12	22.098	21.122	40319	10	12.935	3.386	40391	19	20.306	10.047	40463	35	2.610	20.124
40265	8	25.796	21.768	40320	11	15.413	3.736	40392	34	22.364	10.512	40464*	34	5.156	20.739
40266	24	1.940	22.646	40321	8	15.569	3.935	40393	9	25.956	10.892	40465	12	7.034	20.147
40267	10	4.958	22.116	40322*	43	15.896	3.735	40394	8	0.100	11.681	40466	8	8.270	20.316
40268	10	5.188	22.744	40323	10	17.584	3.059	40395	16	1.608	11.454	40467	19	8.614	20.426
40269	8	18.404	22.809	40324	31	17.926	3.762	40396	12	3.751	11.743	40468	13	14.594	20.916
40270	12	19.898	22.032	40325*	33	20.586	3.902	40397	25	8.918	11.666	40469	9	15.292	20.666
40271	22	21.406	22.886	40326	26	0.166	4.560	40398	25	9.116	11.022	40470	10	15.815	20.292
40272	12	23.106	22.416	40327	26	0.244	4.845	40399	11	10.250	11.756	40471	12	17.878	20.296
40273	10	25.148	22.766	40328	33	2.810	4.144	40400	30	11.883	11.174	40472	8	19.036	20.624
40274	8	1.738	23.820	40329	10	3.246	4.900	40401	8	13.136	11.800	40473	9	19.390	20.906
40275	21	5.842	23.376	40330	8	5.819	4.860	40402	21	14.500	11.375	40474	8	19.504	20.724
40276*	40	9.061	23.410	40331*	41	6.955	4.234	40403	13	25.438	11.208	40475	21	22.172	20.130
40277	11	9.718	23.150	40332	11	8.512	4.762	40404	25	1.538	12.795	40476	10	0.125	21.276
40278	9	13.234	23.014	40333	16	9.966	4.463	40405	26	6.090	12.563	40477	8	3.830	21.875
40279	13	14.658	23.900	40334	10	12.765	4.956	40406	11	6.656	12.834	40478	8	5.596	21.584
40280	20	17.402	23.314	40335	21	13.091	4.054	40407	12	7.720	12.477	40479	8	6.947	21.392
40281	28	23.172	23.949	40336	14	14.034	4.498	40408	9	7.920	12.600	40480	8	9.686	21.300
40282	12	2.937	24.428	40337	8	14.511	4.167	40409*	41	17.830	12.675	40481	10	12.585	21.837
40283	8	19.122	24.138	40338	10	18.026	4.776	40410	9	23.986	12.190	40482	13	13.160	21.690
40284	11	20.828	24.258	40339	11	19.710	4.640	40411	28	2.455	13.464	40483*	44	25.078	21.011
40285*	40	22.776	24.785	40340	9	21.078	4.903	40412	12	2.674	13.516	40484	10	1.151	22.556
40286	13	0.792	25.626	40341	22	4.602	5.560	40413	11	9.604	13.950	40485	8	3.196	22.882
40287	27	3.858	25.171	40342	11	5.458	5.306	40414	29	9.914	13.367	40486	10	7.186	22.849
40288	11	5.687	25.697	40343	11	7.508	5.110	40415	8	12.076	13.636	40487	15	7.810	22.624
40289	16	10.314	25.477	40344	8	7.687	5.178	40416	13	13.564	13.798	40488	13	10.570	22.918
40290	32	12.951	25.406	40345	32	7.864	5.804	40417*	35	19.108	13.671	40489	23	11.414	22.568
40291	16	14.028	25.041	40346*	33	9.276	5.332	40418	16	1.792	14.392	40490	8	17.376	22.076
40292	20	17.243	25.652	40347	18	9.560	5.456	40419	35	2.296	14.221	40491	12	0.522	23.348
40293	14	18.895	25.694	40348	8	13.764	5.867	40420	8	4.250	14.249	40492	8	4.596	23.566
				40349	19	19.300	5.833	40421	12	4.404	14.234	40493	28	10.524	23.448
				40350	39	19.578	5.494	40422	10	8.298	14.738	40494	10	12.424	23.676
				40351	32	22.417	5.556	40423	9	12.823	14.562	40495	29	20.405	23.802
				40352	16	23.676	5.196	40424	11	14.064	14.926	40496*	38	0.848	24.931
				40353	29	0.252	6.362	40425	10	16.960	14.142	40497	32	1.236	24.088
				40354	8	1.816	6.466	40426	8	20.904	14.102	40498	17	4.880	24.088
				40355	10	4.302	6.104	40427*	40	8.570	15.346	40499*	35	5.175	24.480
				40356	14	5.454	6.542	40428	20	11.835	15.282	40500	17	6.842	24.419
				40357	10	14.937	6.405	40429	12	15.500	15.252	40501	8	7.062	24.764
				40358	15	15.476	6.363	40430	8	17.936	15.884	40502	8	9.154	24.569
				40359	10	18.424	6.732	40431	13	18.224	15.718	40503	9	11.070	24.748
				40360	28	0.845	7.344	40432	10	18.578	15.060	40504	32	11.375	24.850
				40361	21	3.521	7.056	40433	13	24.180	15.212	40505	11	14.702	24.716
				40362	15	7.568	7.525	40434	8	2.420	16.337	40506	11	20.618	24.670
				40363	8	9.903	7.934	40435	19	13.936	16.966	40507	24	21.368	24.284
				40364	15	10.586	7.744	40436	16	18.300	16.790	40508	23	22.444	24.877
				40365	8	10.590	7.325	40437	12	20.848	16.600	40509	11	4.794	25.252
				40366	12	14.262	7.955	40438	29	24.430	16.996	40510	33	9.460	25.711
				40367	29	14.398	7.980	40439	12	0.456	17.116	40511	18	12.761	25.744
				40368	14	16.830	7.006	40440	13	1.554	17.692	40512	35	18.909	25.242
				40369*	45	18.904	7.076	40441*	37	11.903	17.510				
				40370	12	19.672	7.125	40442	31	18.166	17.219				
				40371	30	24.777	7.644	40443	10	18.415	17.560				
				40372	20	0.364	8.505	40444	8	23.617	17.679				
				40373	11	6.114	8.463	40445	22	24.694	17.351				
				40374	11	7.984	8.500	40446	10	25.718	17.920				
				40375	9	13.614	8.292	40447	31	3.579	18.446				
				40376	27	15.342	8.692	40448	11	8.227	18.424				
				40377*	39	16.758	8.562	40449	23	10.232	18.935				
				40378	24	19.318	8.138	40450	32	12.156	18.292				
				40379	24	20.416	8.636	40451	12	12.250	18.916				
				40380	31	21.506	8.670	40452	8	12.658	18.752				
				40381	10	22.608	8.168	40453	12	12.914	18.988				
				40382	10	9.684	9.915	40454	9	13.860	18.477				

R.A. 14<sup>h</sup> 12<sup>m</sup>

Plate 1034 ; 1917 April 19.

Provisional Constants.

A	B	C
-0.2552	-0.00116	+0.1118

D	E	F
+0.00083	-0.02558	-0.3308

Mag. = 16.7 - 1.09√d

No.	d	x	y
40551	13	3.136	0.362
40552	60	5.138	0.240
40553	27	5.394	0.989
40554	42	8.719	0.170
40555	43	12.310	0.984
40556	12	12.607	0.938
40557	9	15.032	0.679
40558	11	15.200	0.080
40559	10	16.608	0.254
40560	10	19.442	0.524
40561	30	23.560	0.000
40562	20	5.679	1.114
40563	12	6.754	1.700
40564	17	8.820	1.556
40565*	78	18.066	1.406
40566*	37	5.520	2.451
40567	15	8.138	2.098
40568*	80	11.482	2.082
40569	19	16.056	2.813
40570	23	16.116	2.748
40571	18	16.270	2.794
40572	10	16.585	2.276
40573	13	1.818	3.096
40574	10	6.458	3.088
40575	15	8.092	3.574
40576	11	12.479	3.336
40577*	129	15.852	3.626
40578	14	24.461	3.766
40579	12	9.489	4.512
40580	11	11.756	4.481
40581	23	17.368	4.428
40582	16	17.762	4.982
40583	12	19.560	4.894
40584	9	19.650	4.207
40585	12	20.350	4.697
40586*	47	23.262	4.870
40587	15	23.494	4.511
40588	19	23.736	4.804
40589	20	24.452	4.006
40590*	43	24.999	4.692
40591	26	0.310	5.580
40592	17	1.568	5.217
40593	16	4.449	5.358
40594	9	4.698	5.502
40595	22	10.537	5.610
40596	19	14.778	5.824
40597	25	19.980	5.842
40598	11	24.558	5.526
40599	12	13.342	6.754
40600	15	16.323	6.590
40601	10	21.364	6.250
40602	10	22.134	6.568
40603*	45	22.534	6.938
40604	25	2.673	7.664
40605	25	12.364	7.836



40606	27	14.896	7.560	40678	10	17.194	16.585	40750	29	15.058	25.901	40846	17	2.467	7.158	40918*	70	8.446	16.356
40607*	47	15.110	7.900	40679	23	21.174	16.774	40751	19	16.050	25.874	40847	15	11.544	7.904	40919	24	8.960	16.364
40608	16	24.124	7.497	40680	44	23.830	16.200	40752	11	17.866	25.753	40848	23	13.292	7.072	40920	19	13.944	16.776
40609	12	24.668	7.204	40681	25	24.093	16.339	40753	14	19.326	25.436	40849	34	13.384	7.702	40921	34	14.398	16.446
40610	11	25.077	7.890	40682	28	2.342	17.017	40754	16	20.479	25.800	40850	28	21.901	7.772	40922	19	16.350	16.124
40611	11	0.504	8.193	40683	19	2.606	17.374	40755	9	22.117	25.542	40851	16	22.177	7.797	40923	20	23.435	16.148
40612	12	5.876	8.082	40684	13	3.632	17.939					40852	17	3.381	8.616	40924	16	23.878	16.888
40613	11	15.169	8.320	40685	21	14.526	17.390					40853	17	5.590	8.734	40925	29	1.652	17.412
40614	12	20.473	8.290	40686	12	16.625	17.204					40854	12	13.510	8.218	40926	17	2.166	17.838
40615	25	20.737	8.983	40687	10	18.010	17.458					40855	23	14.330	8.144	40927	15	8.124	17.311
40616	21	25.558	8.677	40688	11	18.891	17.936					40856*	41	20.477	8.442	40928	13	15.722	17.904
40617	10	3.207	9.116	40689	20	23.682	17.444					40857	32	22.016	8.594	40929	11	18.096	17.709
40618	11	7.299	9.904	40690	14	24.186	17.878					40858*	27	22.766	8.646	40930	16	20.490	17.706
40619	14	8.155	9.014	40691	10	4.719	18.200					40859	35	24.059	8.806	40931	13	23.198	17.279
40620	13	8.304	9.648	40692*	26	5.766	18.159					40860	37	6.002	9.117	40932	21	3.102	18.132
40621	14	10.792	9.326	40693	10	5.911	18.664					40861	38	6.708	9.254	40933	18	3.816	18.852
40622	12	11.257	9.190	40694*	40	7.447	18.078					40862	12	11.592	9.632	40934	24	10.866	18.013
40623	26	15.252	9.382	40695	31	11.840	18.185					40863*	31	19.062	9.429	40935*	94	12.468	18.296
40624	26	18.690	9.161	40696*	94	12.501	18.212					40864	16	22.892	9.620	40936*	96	12.568	18.346
40625	11	18.740	9.591	40697	16	14.950	18.832					40865	17	22.972	9.496	40937	25	16.584	18.632
40626	17	18.874	9.152	40698	18	16.370	18.876					40866	14	23.896	9.365	40938	16	25.374	18.878
40627	29	0.264	10.537	40699	12	16.868	18.692					40867*	50	24.445	9.138	40939	20	1.056	19.350
40628	12	3.858	10.913	40700	10	19.113	18.219					40868	14	8.668	10.209	40940	12	5.552	19.424
40629	13	4.410	10.046	40701	18	25.118	18.190					40869	30	9.498	10.093	40941	24	6.834	19.706
40630	38	7.108	10.604	40702	14	25.817	18.921					40870*	48	10.727	10.804	40942	14	8.186	19.388
40631	17	12.160	10.476	40703	10	3.910	19.500					40871	18	12.640	10.116	40943	17	19.966	19.015
40632	25	19.863	10.653	40704	10	5.262	19.200					40872	15	18.877	10.084	40944	16	21.810	19.260
40633*	70	21.868	10.923	40705	22	6.254	19.930					40873	16	19.094	10.246	40945*	48	8.382	20.568
40634	13	9.230	11.310	40706	27	21.723	19.432					40874*	44	19.488	10.500	40946	12	9.793	20.582
40635	13	9.524	11.299	40707	14	23.050	19.370					40875	17	24.690	10.756	40947	20	11.384	20.750
40636	23	14.356	11.298	40708	14	0.088	20.157					40876*	56	1.465	11.030	40948	11	11.905	20.778
40637	21	17.463	11.772	40709	10	4.964	20.660					40877	37	2.586	11.991	40949	16	16.208	20.966
40638	12	19.444	11.830	40710	12	5.016	20.354					40878	12	5.944	11.772	40950	31	16.481	20.281
40639	27	20.870	11.028	40711	24	8.856	20.643					40879	17	7.691	11.662	40951	28	19.394	20.692
40640	11	22.407	11.721	40712	14	11.161	20.237					40880	17	9.236	11.173	40952	27	20.463	20.437
40641*	46	23.603	11.059	40713*	42	14.335	20.658					40881	39	9.430	11.200	40953	13	20.516	20.796
40642	10	1.892	12.214	40714*	56	2.997	21.032					40882	18	14.835	11.372	40954	20	21.464	20.810
40643	23	4.099	12.344	40715	10	3.836	21.612					40883	14	23.298	11.242	40955	17	21.898	20.664
40644	25	4.202	12.130	40716	15	8.775	21.316					40884	20	7.006	12.621	40956	15	23.511	20.398
40645	21	6.562	12.902	40717	14	15.942	21.894					40885	14	10.434	12.819	40957	14	5.135	21.384
40646	22	8.224	12.688	40718	12	16.200	21.870					40886	12	13.848	12.372	40958*	40	5.756	21.070
40647	11	10.463	12.895	40719	13	16.471	21.960					40887	12	14.664	12.876	40959	23	9.139	21.268
40648*	38	12.568	12.616	40720	11	21.783	21.094					40888	24	19.790	12.389	40960	34	13.019	21.314
40649	20	17.536	12.454	40721	10	23.066	21.542					40889	14	23.268	12.961	40961	33	25.736	21.780
40650	10	19.086	12.460	40722	13	5.299	22.901					40890	18	2.586	13.614	40962	16	1.590	22.606
40651	30	24.704	12.036	40723	23	7.493	22.148					40891	16	10.632	13.250	40963	28	2.194	22.520
40652	18	4.842	13.551	40724	13	10.356	22.695					40892*	44	13.401	13.084	40964	20	8.248	22.808
40653	11	5.434	13.673	40725	23	12.092	22.078					40893	24	15.380	13.891	40965	20	16.890	22.962
40654	10	7.445	13.892	40726	26	16.878	22.272					40894	15	18.776	13.750	40966	36	22.864	22.894
40655	18	9.146	13.267	40727	14	18.472	22.416					40895	24	20.326	13.412	40967	39	25.725	22.754
40656*	41	15.208	13.534	40728	12	23.528	22.634					40896	15	24.446	13.714	40968	26	5.076	23.523
40657	10	23.786	13.230	40729	22	24.133	22.558					40897	32	25.100	13.732	40969	18	8.606	23.798
40658	16	24.676	13.660	40730	10	0.724	23.538					40898*	56	1.554	14.974	40970	21	8.642	23.051
40659	11	7.016	14.430	40731	15	16.110	23.938					40899	14	4.281	14.329	40971	16	10.364	23.540
40660*	52	14.280	14.324	40732	23	16.118	23.968					40900*	42	6.824	14.686	40972	14	10.570	23.502
40661	13	14.430	14.060	40733	22	18.932	23.284					40901*	57	9.653	14.999	40973	34	20.528	23.392
40662	28	16.922	14.564	40734	32	19.886	23.854					40902*	39	15.062	14.176	40974	14	22.128	23.059
40663	18	20.838	14.064	40735	25	21.117	23.728					40903	17	16.324	14.692	40975	50	3.547	24.512
40664	15	23.452	14.630	40736	11	21.246	23.554					40904	16	18.248	14.428	40976*	54	4.268	24.325
40665	14	2.088	15.236	40737	18	0.370	24.905					40905	36	18.284	14.063	40977	19	6.604	24.116
40666	12	10.278	15.091	40738*	30	4.619	24.314					40906	14	0.500	15.506	40978	18	10.316	24.110
40667	18	13.000	15.646	40739	19	4.899	24.544					40907	17	2.154	15.744	40979	31	12.284	24.174
40668	10	20.366	15.385	40740	12	5.354	24.767					40908	32	2.543	15.798	40980	24	8.658	25.484
40669	12	22.560	15.318	40741	10	8.988	24.409					40909	14	3.170	15.360	40981	28	9.508	25.890
40670	12	23.442	15.370	40742	20	11.808	24.760					40910*	38	8.721	15.763	40982	19	9.631	25.580
40671*	60	23.626	15.001	40743*	42	12.053	24.146					40911	17	15.318	15.741	40983	38	11.198	25.220
40672	15	24.208	15.782	40744	25	15.106	24.338					40912*	39	17.251	15.336	40984	20	15.062	25.278
40673	22	24.598	15.844	40745	24	17.610	24.833					40913	41	23.730	15.581	40985	23	15.070	25.324
40674	12	4.767	16.584	40746	45	25.452	24.574					40914	18	24.638	15.536				



**R.A. 14<sup>h</sup> 28<sup>m</sup>**

Plate 1040 ; 1917 April 20.

*Provisional Constants.*A B C  
-02560 +00122 +1456D E F  
-00119 -02587 -0695 $\text{Mag.} = 16.0 - 1.09\sqrt{d}$ 

No.	d	x	y
41001	22	0.293	0.968
41002	11	8.935	0.232
41003	16	10.416	0.534
41004	18	13.724	0.518
41005	23	21.466	0.482
41006	29	22.946	0.608
41007	11	5.580	1.740
41008	20	9.248	1.612
41009	30	10.458	1.599
41010	10	12.340	1.640
41011	12	17.384	1.919
41012	22	19.005	1.561
41013	22	1.256	2.663
41014	15	2.584	2.181
41015	9	8.648	2.394
41016	9	14.828	2.945
41017	10	14.848	2.931
41018	14	21.432	2.989
41019*	32	1.528	3.879
41020	15	4.244	3.773
41021*	35	7.748	3.957
41022	10	4.740	4.052
41023	18	9.677	4.163
41024	13	10.640	4.010
41025	11	12.322	4.759
41026	16	12.522	4.068
41027	20	16.894	4.906
41028	31	17.298	4.468
41029	22	25.513	4.359
41030	11	3.270	5.152
41031	22	4.500	5.309
41032	10	6.526	5.350
41033	10	6.916	5.786
41034*	34	9.950	5.348
41035*	36	17.767	5.418
41036*	29	21.590	5.585
41037	10	22.832	5.404
41038	21	0.573	6.264
41039	8	9.232	6.753
41040	10	11.649	6.370
41041	12	12.695	6.274
41042	28	22.106	6.007
41043	10	24.369	6.932
41044	12	12.518	7.510
41045	10	12.530	7.548
41046	28	13.206	7.237
41047	9	18.843	7.411
41048*	33	19.304	7.154
41049	15	0.068	8.174
41050	14	4.262	8.316
41051	12	5.604	8.972
41052	10	8.296	8.900
41053	13	20.299	8.706
41054	17	23.264	8.873
41055*	20	0.663	9.020

41056	10	0.794	9.993
41057	12	0.876	9.870
41058	13	1.800	9.732
41059	28	1.958	9.172
41060*	37	2.344	9.500
41061*	39	13.432	9.738
41062	13	4.218	10.297
41063	13	5.198	10.832
41064	11	11.019	10.120
41065*	36	12.830	10.864
41066*	40	14.601	10.099
41067	12	21.453	10.850
41068	13	2.602	11.118
41069	9	3.171	11.654
41070	10	3.173	11.640
41071	8	14.400	11.553
41072	8	0.350	12.162
41073	20	5.422	12.910
41074	14	6.023	12.112
41075	9	14.272	12.974
41076	15	19.864	12.872
41077	12	23.724	12.628
41078	12	6.936	13.510
41079	9	7.633	13.820
41080	20	7.930	13.314
41081	12	10.490	13.755
41082*	47	14.382	13.517
41083	9	22.712	13.316
41084	8	2.382	14.071
41085	22	3.034	14.088
41086	20	12.124	14.228
41087	10	15.010	14.432
41088*	37	17.768	14.935
41089	30	19.390	14.484
41090	9	0.388	15.584
41091	32	1.680	15.950
41092	12	2.586	15.895
41093	9	4.897	15.149
41094	12	19.166	15.164
41095	10	20.415	15.510
41096	25	22.153	15.762
41097	24	23.834	15.252
41098	20	25.978	15.272
41099	20	1.386	16.516
41100	12	16.202	16.608
41101	28	18.982	16.512
41102	8	19.791	16.684
41103	8	20.340	16.591
41104	10	20.852	16.567
41105	14	25.382	16.140
41106	10	1.840	17.250
41107	15	6.548	17.756
41108	10	20.964	17.435
41109	25	6.216	18.832
41110*	42	6.228	18.836
41111	10	7.762	18.547
41112	9	12.150	18.232
41113	9	13.172	18.616
41114	11	0.534	19.372
41115	10	3.350	19.229
41116	8	5.778	19.480
41117	14	9.159	19.486
41118	12	10.320	19.256
41119	12	14.246	19.698
41120	12	17.592	19.292
41121	29	18.312	19.660
41122	8	21.847	19.404
41123	14	22.236	19.630
41124	31	23.796	19.320
41125	12	24.443	19.082
41126	9	1.498	20.768
41127	14	8.260	20.826

41128	10	8.299	20.332
41129	12	14.666	20.439
41130	20	17.947	20.090
41131	10	18.762	20.508
41132*	37	21.648	20.558
41133	29	24.103	20.302
41134	24	25.428	20.813
41135	29	4.782	21.196
41136	11	5.538	21.020
41137	17	6.927	21.390
41138	13	7.286	21.754
41139	11	11.631	21.126
41140	9	13.066	21.786
41141*	27	20.220	21.570
41142	20	3.732	22.126
41143	8	14.165	22.868
41144	15	19.513	22.164
41145	19	19.815	22.646
41146	25	21.864	22.572
41147	20	23.157	22.560
41148	11	0.137	23.440
41149	31	0.870	23.264
41150*	39	3.728	23.102
41151	14	6.662	23.692
41152	10	8.403	23.406
41153	10	8.600	23.718
41154	8	12.082	23.052
41155	8	12.208	23.594
41156	10	12.770	23.606
41157	9	16.682	23.600
41158	28	17.139	23.742
41159	8	3.778	24.430
41160	30	4.226	24.963
41161	11	4.718	24.080
41162	24	12.258	24.365
41163	13	14.290	24.722
41164*	76	16.190	24.296
41165	19	18.016	24.604
41166*	41	24.348	24.208
41167	10	25.272	24.252
41168	9	25.388	24.143
41169	14	4.428	25.988
41170	11	5.519	25.628
41171	32	9.029	25.775
41172	9	11.842	25.483
41173	11	13.132	25.158
41174	10	14.603	25.194
41175	19	17.992	25.810
41176	12	20.384	25.410
41177	15	23.262	25.620
41178	11	25.472	25.728

**R.A. 14<sup>h</sup> 36<sup>m</sup>**

Plate 1036 ; 1917 April 19.

*Provisional Constants.*A B C  
-02580 +00805 -0060D E F  
-00840 -02582 -1742 $\text{Mag.} = 16.0 - 1.09\sqrt{d}$ 

No.	d	x	y
41201	10	0.194	0.626
41202	24	0.536	0.538
41203	13	12.364	0.814
41204	19	18.948	0.294
41205	45	20.664	0.145
41206	20	22.220	0.821
41207	14	24.290	0.949
41208	14	7.404	1.216
41209	31	7.725	1.043
41210	9	11.268	1.788
41211	10	13.511	1.248
41212	10	21.154	1.326
41213	16	22.826	1.598
41214	23	25.099	1.326
41215	10	0.112	2.331
41216	16	6.512	2.691
41217	16	7.346	2.691
41218	11	9.584	2.619
41219	21	12.936	2.303
41220	18	13.567	2.004
41221	18	14.672	2.734
41222	11	15.068	2.094
41223	10	15.955	2.478
41224	11	18.554	2.178
41225	25	20.139	2.335
41226	20	21.287	2.389
41227	25	10.994	3.923
41228*	49	13.287	3.524
41229	8	15.402	3.691
41230	10	16.330	3.398
41231	8	17.497	3.927
41232	12	20.548	3.404
41233	10	21.957	3.005
41234	13	23.916	3.167
41235	26	24.628	3.770
41236	12	25.932	3.446
41237	25	3.172	4.242
41238	10	10.666	4.135
41239	15	12.180	4.604
41240	18	12.608	4.130
41241	10	15.167	4.170
41242	19	16.416	4.464
41243	11	0.508	5.340
41244*	42	10.935	5.032
41245	9	16.822	5.560
41246	16	17.579	5.301
41247	10	19.180	5.928
41248	23	25.141	5.996
41249	20	25.442	5.138
41250	8	1.768	6.460
41251	10	2.074	6.838
41252	25	8.502	6.258
41253	8	15.968	6.193
41254*	39	18.099	6.840
41255	8	23.831	6.844

41256	15	24.282	6.062
41257*	42	24.660	6.971
41258	9	24.697	6.092
41259	19	4.641	7.216
41260	9	9.042	7.460
41261	8	9.338	7.798
41262	8	12.210	7.202
41263	14	12.762	7.278
41264	21	15.448	7.230
41265*	35	17.746	7.962
41266	10	18.116	7.460
41267	9	19.920	7.348
41268	9	24.770	7.685
41269*	60	25.024	7.160
41270	10	1.006	8.796
41271	8	18.740	8.232
41272	11	21.478	8.674
41273	10	21.796	8.152
41274*	40	23.716	8.248
41275	8	5.307	9.658
41276	13	6.385	9.550
41277	18	15.682	9.974
41278	10	19.278	9.348
41279	10	25.011	9.491
41280	10	2.172	10.520
41281	9	2.710	10.146
41282	28	6.069	10.305
41283	10	8.862	10.606
41284	11	13.326	10.468
41285	9	19.088	10.942
41286	12	22.844	10.104
41287	10	25.811	10.107
41288	20	7.186	11.276
41289*	40	8.921	11.686
41290	9	9.056	11.821
41291	32	9.597	11.814
41292	8	10.682	11.645
41293	23	11.856	11.612
41294*	67	15.906	11.034
41295	8	16.329	11.468
41296	14	22.358	11.934
41297	12	22.954	11.802
41298	13	23.140	11.596
41299	11	1.537	12.543
41300	8	5.350	12.732
41301*	34	6.280	12.743
41302	9	15.295	12.184
41303	11	16.912	12.012
41304	20	25.748	12.870
41305	13	0.534	13.250
41306	9	0.626	13.206
41307	10	5.168	13.717
41308	16	6.014	13.790
41309	14	8.074	13.503
41310	16	9.111	13.905
41311	13	16.128	13.574
41312	10	16.233	13.334
41313	10	18.386	13.882
41314	24	21.320	13.475
41315	10	22.212	13.824
41316	8	23.850	13.297
41317*	28	8.186	14.888
41318	10	12.680	14.859
41319	11	13.626	14.788
41320	13	19.498	14.677
41321	8	20.390	14.328
41322	8	21.894	14.751
41323	24	22.328	14.392
41324	24	0.019	15.705
41325	24	1.693	15.166
41326	15	3.835	15.148
41327	16	3.861	15.113



41328	9	7.711	15.416	41400	8	5.528	22.318	41455	24	17.335	0.926	41527*	45	23.548	9.504	41599	28	7.564	20.269
41329*	27	10.030	15.956	41401	8	7.262	22.500	41456	80	18.725	0.220	41528	11	25.580	9.610	41600	8	7.844	20.628
41330	10	15.817	15.215	41402	16	8.914	22.678	41457	17	20.850	0.511	41529	10	0.516	10.530	41601	14	11.154	20.054
41331	13	20.082	15.319	41403	23	10.118	22.092	41458	17	20.910	0.445	41530	14	8.599	10.150	41602	16	16.087	20.842
41332	20	22.791	15.562	41404	12	12.452	22.704	41459	27	22.736	0.237	41531*	38	14.950	10.254	41603	31	17.645	20.676
41333	13	3.256	16.024	41405	19	12.508	22.052	41460	9	23.819	0.110	41532	35	19.415	10.120	41604	14	20.427	20.460
41334	12	6.818	16.986	41406	19	18.088	22.264	41461	12	1.856	1.359	41533	9	19.591	10.588	41605	12	21.026	20.217
41335	8	7.616	16.326	41407*	36	23.219	22.794	41462	13	1.928	1.128	41534	8	22.770	10.305	41606	27	21.651	20.125
41336	14	12.210	16.403	41408	8	3.762	23.833	41463	24	2.671	1.725	41535	23	3.908	11.074	41607	26	7.183	21.828
41337	11	13.098	16.250	41409	23	5.210	23.981	41464	24	6.130	1.982	41536*	41	4.925	11.813	41608	17	7.651	21.980
41338	15	16.668	16.384	41410*	41	6.430	23.280	41465*	33	6.246	1.748	41537	8	18.228	11.926	41609	16	15.448	21.573
41339	24	18.120	16.678	41411	11	8.377	23.445	41466	23	7.000	1.149	41538	10	0.050	12.364	41610	25	21.246	21.794
41340	10	21.788	16.971	41412	8	14.127	23.198	41467	8	7.556	1.496	41539	9	0.812	12.434	41611	13	4.215	22.726
41341	12	23.788	16.046	41413	20	23.816	23.875	41468	8	11.214	1.186	41540	23	4.250	12.629	41612	21	8.826	22.540
41342	10	24.942	16.644	41414*	44	2.366	24.107	41469	11	15.126	1.354	41541	18	7.755	12.684	41613	9	10.275	22.748
41343	12	25.696	16.533	41415	10	3.299	24.137	41470	15	18.559	1.114	41542	15	9.827	12.982	41614	17	10.796	22.390
41344	10	25.936	16.626	41416	9	3.412	24.024	41471	10	0.400	2.026	41543	11	11.024	12.506	41615	9	15.977	22.023
41345	11	2.319	17.671	41417	19	7.244	24.450	41472	26	9.472	2.394	41544*	38	19.996	12.934	41616	14	20.061	22.791
41346*	31	6.768	17.544	41418	9	9.566	24.849	41473	10	12.066	2.754	41545	9	20.356	12.176	41617*	36	1.038	23.216
41347	8	9.557	17.144	41419	21	10.504	24.502	41474	9	14.254	2.520	41546	14	21.423	12.146	41618	10	5.367	23.052
41348	10	14.416	17.226	41420	8	11.356	24.699	41475*	52	17.861	2.092	41547	17	3.452	13.262	41619	31	10.374	23.556
41349	8	14.478	17.350	41421*	20	12.680	24.175	41476	41	18.051	2.098	41548	9	6.235	13.752	41620	10	11.205	23.038
41350*	34	16.560	17.931	41422	8	13.744	24.711	41477	20	23.074	2.962	41549*	43	12.476	13.704	41621	13	14.984	23.156
41351	16	19.167	17.886	41423	11	16.155	24.886	41478	9	1.508	3.581	41550	10	15.694	13.765	41622	31	18.388	23.926
41352	12	21.150	17.050	41424	11	17.956	24.536	41479	9	3.055	3.438	41551*	47	16.100	13.374	41623	12	20.064	23.870
41353	24	25.127	17.046	41425	25	19.304	24.414	41480*	43	15.136	3.439	41552	14	18.674	13.808	41624	35	20.120	23.936
41354	12	2.372	18.981	41426*	40	21.282	24.730	41481	12	20.024	3.817	41553	13	23.334	13.722	41625	15	20.596	23.989
41355*	49	4.968	18.428	41427	20	22.486	24.771	41482	24	20.838	3.644	41554	10	25.643	13.582	41626	10	0.462	24.569
41356	13	10.370	18.392	41428	12	22.625	24.141	41483*	47	22.219	3.795	41555	35	25.756	13.422	41627	17	1.650	24.290
41357*	68	12.244	18.237	41429	9	23.744	24.584	41484	23	2.225	4.176	41556	31	0.050	14.822	41628	15	3.128	24.915
41358	13	13.244	18.930	41430	20	25.286	24.518	41485	8	10.668	4.138	41557	28	6.580	14.296	41629	8	5.751	24.872
41359	11	16.372	18.972	41431	16	1.312	25.540	41486	33	16.330	4.565	41558	32	12.953	14.923	41630	13	6.187	24.812
41360	9	18.860	18.418	41432	11	3.526	25.611	41487	16	17.080	4.384	41559*	34	15.388	14.257	41631	9	13.146	24.422
41361	13	20.834	18.989	41433	18	6.700	25.162	41488	8	17.147	4.528	41560	17	19.338	14.418	41632	34	19.038	24.474
41362	12	21.855	18.570	41434	10	7.228	25.620	41489*	34	17.674	4.027	41561	9	23.678	14.828	41633	13	19.350	24.595
41363	11	22.350	18.242	41435	15	9.309	25.150	41490	11	18.550	4.576	41562	21	0.526	15.988	41634	8	24.840	24.466
41364	9	22.774	18.648	41436	31	10.763	25.640	41491*	30	24.079	4.964	41563	28	4.065	15.185	41635	19	0.330	25.202
41365	12	0.174	19.569	41437	8	11.476	25.167	41492*	24	3.056	5.536	41564	13	4.098	15.546	41636	29	8.956	25.476
41366	24	1.726	19.234	41438	8	11.490	25.662	41493	8	10.545	5.349	41565*	35	4.458	15.710	41637	39	13.295	25.814
41367*	24	8.272	19.168	41439	13	19.486	25.542	41494	10	15.484	5.220	41566	8	5.356	15.160	41638	27	19.290	25.487
41368*	22	8.387	19.005	41440	18	20.360	25.266	41495	31	17.582	5.933	41567	8	12.040	15.662	41639	23	21.740	25.330
41369	18	10.454	19.078	41441	9	20.810	25.314	41496	32	18.234	5.640	41568	10	17.919	15.457	41640	8	25.599	25.935
41370	20	10.909	19.104	41442	14	22.000	25.796	41497	10	21.282	5.608	41569	9	1.530	16.462				
41371	16	10.917	19.646	41443	10	23.343	25.714	41498	8	21.530	5.088	41570	8	3.444	16.930				
41372	8	17.724	19.273					41499	25	22.424	5.590	41571	10	8.690	16.733				
41373	15	20.416	19.690					41500	14	1.906	6.473	41572	27	10.600	16.173				
41374	23	2.054	20.210					41501	28	2.766	6.396	41573	11	11.476	16.483				
41375	22	3.389	20.694					41502	17	4.000	6.600	41574	10	11.511	16.574				
41376*	29	6.070	20.486					41503	8	6.850	6.116	41575	14	21.628	16.212				
41377	10	10.553	20.340					41504*	46	14.890	6.060	41576	17	24.745	16.430				
41378	9	15.614	20.129					41505*	43	16.815	6.800	41577	29	2.880	17.444				
41379	18	16.108	20.890					41506	14	17.442	6.190	41578*	31	5.018	17.343				
41380	11	19.388	20.442					41507	8	20.848	6.568	41579	8	9.784	17.756				
41381	10	3.210	21.746					41508*	45	2.292	7.376	41580	23	12.494	17.984				
41382	20	4.800	21.439					41509*	58	2.656	7.564	41581	28	14.198	17.953				
41383	19	5.303	21.237					41510	27	8.972	7.675	41582	29	14.992	17.192				
41384*	32	7.086	21.196					41511	10	11.980	7.297	41583	9	17.802	17.804				
41385	32	8.556	21.214					41512*	40	12.728	7.088	41584	9	20.655	17.586				
41386	11	9.826	21.518					41513	25	22.062	7.871	41585	9	4.814	18.236				
41387	20	10.306	21.220					41514	9	22.114	7.500	41586*	80	12.104	18.340				
41388	10	11.880	21.192					41515	42	25.580	7.255	41587	25	16.238	18.180				
41389*	33	13.083	21.484					41516*	41	1.364	8.664	41588	17	20.826	18.050				
41390	12	14.296	21.307					41517	8	2.417	8.086	41589	12	23.355	18.258				
41391	27	16.011	21.698					41518	21	3.926	8.000	41590	16	4.808	19.156				
41392	9	17.550	21.274					41519	29	4.624	8.915	41591	22	5.596	19.134				
41393	9	17.604	21.824					41520	15	20.534	8.100	41592	10	7.594	19.472				
41394	9	19.602	21.756					41521	10	24.452	8.524	41593	9	8.794	19.428				
41395	18	20.228	21.080					41522	11	3.735	9.134	41594	35	10.375	19.853				
41396	15																		



41657	10	20° 9' 38"	0° 6' 80"	41729	17	24° 7' 10"	13° 4' 26"	41801	11	20° 2' 54"	24° 7' 66"	41891*	37	1° 0' 64"	5° 7' 66"	41963*	40	11° 4' 90"	15° 1' 41"
41658	12	21° 9' 86"	0° 8' 03"	41730	24	5° 8' 16"	14° 9' 00"	41802	12	23° 9' 83"	24° 0' 98"	41892	13	10° 1' 14"	5° 5' 64"	41964	13	18° 6' 45"	15° 6' 54"
41659	10	11° 1' 07"	1° 1' 60"	41731	23	16° 4' 47"	14° 6' 30"	41803*	31	24° 7' 26"	24° 9' 16"	41893	10	12° 6' 55"	5° 0' 90"	41965	9	21° 0' 42"	15° 6' 63"
41660	15	11° 2' 69"	1° 2' 48"	41732	10	17° 1' 88"	14° 8' 52"	41804	10	25° 7' 00"	24° 6' 70"	41894	8	13° 1' 97"	5° 1' 20"	41966	10	23° 2' 14"	15° 4' 64"
41661	23	11° 4' 90"	1° 8' 38"	41733	11	17° 5' 98"	14° 5' 74"	41805	45	9° 8' 86"	25° 9' 35"	41895	13	15° 8' 20"	5° 2' 78"	41967	10	2° 4' 94"	16° 3' 26"
41662	12	11° 8' 00"	1° 9' 16"	41734	10	19° 0' 10"	14° 0' 80"	41806	51	10° 4' 14"	25° 2' 56"	41896	23	16° 4' 54"	5° 8' 24"	41968	13	10° 4' 62"	16° 3' 75"
41663*	30	21° 0' 96"	1° 3' 76"	41735	27	25° 6' 89"	14° 4' 17"	41807	27	15° 1' 41"	25° 1' 84"	41897	16	22° 4' 62"	5° 2' 47"	41969	12	17° 4' 22"	16° 1' 12"
41664	25	15° 4' 02"	2° 8' 16"	41736*	27	10° 1' 90"	15° 4' 16"	41808	11	20° 8' 28"	25° 7' 22"	41898	8	2° 3' 68"	6° 7' 35"	41970	10	17° 5' 23"	16° 2' 52"
41665	45	0° 1' 56"	3° 8' 84"	41737	10	10° 7' 36"	15° 3' 50"					41899	20	4° 3' 03"	6° 8' 54"	41971	10	19° 8' 87"	16° 1' 77"
41666	12	1° 0' 06"	3° 0' 46"	41738	12	11° 2' 88"	15° 7' 62"					41900	16	4° 6' 04"	6° 5' 46"	41972	8	0° 8' 92"	17° 6' 18"
41667	10	9° 0' 87"	3° 6' 67"	41739	12	15° 9' 53"	15° 7' 34"					41901	12	11° 3' 73"	6° 6' 84"	41973	15	3° 7' 13"	17° 5' 68"
41668	11	9° 5' 19"	3° 2' 80"	41740*	21	18° 2' 20"	15° 3' 08"					41902	16	11° 9' 06"	6° 3' 50"	41974	16	4° 3' 77"	17° 7' 84"
41669	12	10° 2' 04"	3° 6' 80"	41741	25	22° 3' 04"	15° 0' 40"					41903	11	3° 2' 24"	7° 9' 84"	41975	9	9° 0' 07"	17° 2' 76"
41670	10	12° 6' 95"	3° 6' 70"	41742	14	2° 8' 09"	16° 4' 98"					41904	11	4° 6' 20"	7° 1' 48"	41976	8	9° 9' 00"	17° 0' 40"
41671	13	13° 1' 34"	3° 3' 94"	41743	18	9° 2' 44"	16° 6' 49"					41905	15	11° 5' 16"	7° 2' 18"	41977	8	11° 2' 44"	17° 4' 34"
41672*	51	20° 2' 74"	3° 4' 83"	41744*	33	15° 3' 00"	16° 3' 30"					41906	11	13° 8' 18"	7° 1' 80"	41978	20	11° 7' 96"	17° 5' 08"
41673	10	6° 2' 41"	4° 7' 59"	41745	14	18° 3' 92"	16° 6' 58"					41907*	21	24° 2' 72"	7° 3' 48"	41979	25	16° 5' 66"	17° 6' 54"
41674	21	15° 8' 03"	4° 8' 13"	41746	12	23° 0' 62"	16° 5' 29"					41908	12	25° 1' 54"	7° 3' 96"	41980	10	17° 9' 52"	17° 0' 66"
41675	12	17° 8' 16"	4° 5' 58"	41747	10	24° 7' 60"	16° 1' 35"					41909	23	1° 8' 04"	8° 5' 49"	41981	8	18° 6' 85"	17° 3' 69"
41676	22	20° 7' 44"	4° 9' 60"	41748	10	19° 8' 35"	17° 4' 36"					41910	15	6° 1' 14"	8° 4' 59"	41982*	20	22° 2' 40"	17° 1' 62"
41677	15	21° 7' 01"	4° 2' 50"	41749	8	23° 1' 46"	17° 4' 16"					41911	9	8° 5' 98"	8° 1' 31"	41983	10	24° 1' 62"	17° 9' 34"
41678	16	0° 3' 82"	5° 6' 80"	41750	16	25° 9' 68"	17° 3' 89"					41912	10	10° 5' 64"	8° 4' 02"	41984	10	25° 1' 54"	17° 8' 49"
41679*	20	2° 0' 32"	5° 0' 40"	41751	11	1° 4' 38"	18° 3' 38"					41913	14	11° 8' 09"	8° 7' 46"	41985	10	3° 0' 62"	18° 6' 76"
41680	12	9° 3' 36"	5° 0' 04"	41752*	27	9° 9' 57"	18° 5' 76"					41914	10	17° 4' 94"	8° 2' 82"	41986	8	7° 2' 82"	18° 5' 40"
41681	27	15° 4' 02"	5° 3' 00"	41753	10	10° 5' 86"	18° 2' 30"					41915	11	18° 2' 40"	8° 7' 60"	41987	8	12° 5' 10"	18° 5' 51"
41682	12	20° 3' 52"	5° 2' 43"	41754	9	12° 1' 46"	18° 1' 22"					41916	14	19° 0' 10"	8° 2' 98"	41988	12	15° 9' 56"	18° 3' 03"
41683*	43	23° 4' 32"	5° 5' 61"	41755	10	13° 5' 66"	18° 9' 14"					41917	16	19° 2' 72"	8° 3' 46"	41989	12	16° 1' 39"	18° 5' 16"
41684	17	5° 8' 80"	6° 7' 72"	41756	18	14° 1' 31"	18° 3' 79"					41918	14	2° 8' 54"	9° 7' 79"	41990	10	18° 0' 87"	18° 7' 24"
41685*	51	9° 0' 32"	6° 9' 88"	41757	14	14° 6' 14"	18° 9' 84"					41919	12	3° 1' 58"	9° 3' 56"	41991*	20	19° 7' 50"	18° 0' 38"
41686	13	10° 5' 30"	6° 8' 72"	41758*	36	16° 8' 72"	18° 7' 70"					41920	11	3° 3' 86"	9° 4' 54"	41992	10	21° 8' 26"	18° 6' 95"
41687	24	11° 1' 99"	6° 8' 78"	41759	20	16° 9' 36"	18° 5' 14"					41921	22	3° 4' 09"	9° 1' 58"	41993	12	23° 7' 10"	18° 7' 88"
41688	9	12° 6' 61"	6° 7' 26"	41760	22	17° 2' 74"	18° 2' 90"					41922	10	10° 2' 16"	9° 2' 20"	41994	14	24° 3' 71"	18° 1' 13"
41689	13	13° 4' 47"	6° 4' 11"	41761	10	17° 3' 48"	18° 1' 58"					41923	8	10° 6' 83"	9° 1' 48"	41995*	20	24° 6' 66"	18° 4' 08"
41690	15	13° 4' 69"	6° 4' 46"	41762*	34	18° 4' 45"	18° 5' 76"					41924*	40	14° 1' 78"	9° 7' 46"	41996	8	12° 8' 54"	19° 5' 16"
41691	10	15° 1' 64"	6° 3' 24"	41763	10	25° 3' 10"	18° 4' 92"					41925*	37	14° 4' 86"	9° 2' 35"	41997*	18	15° 1' 90"	19° 4' 84"
41692	18	0° 0' 40"	7° 9' 62"	41764*	60	1° 7' 54"	19° 2' 32"					41926	15	23° 0' 56"	9° 2' 14"	41998	9	17° 2' 16"	19° 3' 11"
41693*	35	3° 5' 52"	7° 3' 14"	41765*	49	5° 6' 86"	19° 6' 89"					41927	9	25° 8' 70"	9° 3' 30"	41999	16	19° 8' 52"	19° 2' 39"
41694	11	9° 7' 48"	7° 2' 84"	41766	10	8° 9' 50"	19° 7' 30"					41928	13	6° 4' 30"	10° 3' 64"	42000	9	21° 4' 64"	19° 1' 14"
41695	10	10° 2' 58"	7° 3' 18"	41767	10	20° 4' 54"	19° 8' 56"					41929	12	9° 3' 50"	10° 6' 74"	42001	10	22° 7' 34"	19° 3' 14"
41696	21	20° 9' 26"	7° 3' 58"	41768	12	20° 8' 30"	19° 6' 86"					41930	9	10° 7' 36"	10° 1' 52"	42002	8	23° 9' 62"	19° 1' 96"
41697	10	0° 3' 46"	8° 9' 26"	41769	20	13° 0' 79"	20° 0' 66"					41931*	36	20° 7' 26"	10° 7' 54"	42003	8	2° 2' 50"	20° 3' 77"
41698	10	2° 4' 39"	8° 5' 98"	41770	11	16° 5' 71"	20° 6' 50"					41932	15	21° 9' 55"	10° 4' 22"	42004	10	2° 3' 10"	20° 3' 41"
41699	12	5° 4' 84"	8° 1' 16"	41771	10	24° 4' 84"	20° 1' 85"					41933*	37	1° 0' 68"	11° 1' 57"	42005	14	3° 1' 39"	20° 2' 31"
41700	19	7° 6' 42"	8° 6' 94"	41772	11	25° 3' 70"	20° 0' 50"					41934	10	1° 3' 03"	11° 0' 58"	42006	10	6° 7' 86"	20° 0' 34"
41701	12	8° 2' 08"	8° 5' 90"	41773	11	2° 7' 02"	21° 4' 56"					41935*	34	4° 4' 88"	11° 9' 60"	42007	12	9° 8' 14"	20° 2' 24"
41702	11	9° 4' 68"	8° 2' 47"	41774*	28	7° 1' 48"	21° 1' 50"					41936	9	20° 1' 06"	11° 4' 28"	42008*	16	18° 2' 00"	20° 4' 70"
41703	13	14° 0' 34"	8° 2' 90"	41775*	35	12° 4' 36"	21° 0' 66"					41937*	23	22° 2' 00"	11° 6' 81"	42009	10	19° 7' 60"	20° 7' 40"
41704	19	20° 3' 15"	8° 2' 70"	41776	10	16° 5' 16"	21° 5' 45"					41938	22	11° 2' 36"	12° 6' 02"	42010	14	23° 1' 54"	20° 6' 69"
41705	28	24° 1' 46"	8° 3' 50"	41777*	38	19° 2' 24"	21° 2' 74"					41939*	51	14° 1' 30"	12° 4' 84"	42011	12	25° 1' 14"	20° 9' 50"
41706	25	25° 7' 41"	8° 9' 74"	41778	13	19° 5' 43"	21° 0' 88"					41940	10	18° 5' 47"	12° 0' 09"	42012	13	4° 4' 20"	21° 2' 86"
41707*	42	1° 5' 40"	9° 5' 84"	41779	11	8° 2' 00"	22° 7' 54"					41941	15	21° 9' 22"	12° 0' 70"	42013	11	4° 8' 23"	21° 1' 30"
41708	13	3° 5' 75"	9° 6' 70"	41780	16	13° 2' 42"	22° 6' 24"					41942	19	22° 6' 77"	12° 8' 42"	42014	14	5° 5' 98"	21° 5' 86"
41709	15	19° 3' 10"	9° 0' 06"	41781	10	17° 3' 90"	22° 3' 40"					41943	24	25° 1' 24"	12° 7' 78"	42015	10	11° 2' 87"	21° 1' 92"
41710	14	25° 1' 80"	9° 5' 90"	41782	15	18° 6' 48"	22° 0' 87"					41944	15	25° 7' 48"	12° 3' 83"	42016*	18	12° 3' 87"	21° 1' 63"
41711	10	25° 4' 90"	9° 1' 68"	41783	10	19° 3' 40"	22° 0' 40"					41945	11	3° 1' 58"	13° 7' 26"	42017	13	18° 1' 62"	21° 4' 00"
41712	11	25° 7' 15"	9° 2' 70"	41784*	49	25° 0' 60"	22° 8' 20"					41946	16	4° 5' 08"	13° 8' 02"	42018	15	18° 2' 13"	21° 2' 31"
41713	11	8° 6' 47"	10° 3' 57"	41785	27	25° 4' 68"	22° 3' 20"					41947	13	18° 3' 20"	13° 4' 70"	42019	8	23° 2' 95"	21° 9' 54"
41714*	40	23° 3' 84"	10° 9' 52"	41786	8	6° 5' 43"	23° 0' 94"					41948	24	20° 6' 84"	13° 3' 62"	42020	13	25° 1' 14"	21° 3' 44"
41715	10	4° 7' 70"	11° 0' 24"	41787	14	6° 7' 24"	23° 2' 68"					41949	8	3° 2' 75"	14° 6' 94"	42021	29	3° 2' 56"	22° 4' 98"
41716	19	5° 1' 20"	11° 7' 00"	41788	17	9° 4' 32"	23° 9' 74"					41950	24	3° 4' 06"	14° 5' 98"	42022	15	13° 9' 28"	22° 2' 45"
41717	9	11° 4' 46"	11° 6' 01"	41789	16	13° 3' 77"													



42035	9	18.726	23.131	42133*	40	10.111	5.948	42205	17	1.871	18.756	42257	19	24.993	0.590	42329	25	8.485	9.430
42036	17	19.080	23.526	42134	20	12.613	5.772	42206*	20	2.818	18.364	42258	16	1.410	1.248	42330	26	10.941	9.724
42037	11	22.373	23.024	42135	23	20.740	5.334	42207	26	5.852	18.084	42259	11	2.505	1.163	42331	17	11.538	9.988
42038	12	0.143	24.026	42136	22	12.428	6.471	42208	18	17.312	19.869	42260	15	3.123	1.218	42332	16	12.764	9.911
42039	16	1.789	24.293	42137	23	13.900	6.110	42209*	54	21.156	19.801	42261	32	4.325	1.067	42333	25	17.368	9.702
42040	13	3.511	24.846	42138	19	19.236	6.794	42210	16	21.346	19.745	42262	12	8.068	1.729	42334*	35	19.563	9.495
42041	20	3.764	24.040	42139*	36	24.800	6.768	42211	16	1.340	20.648	42263	30	15.464	1.821	42335	10	20.593	9.182
42042	9	4.744	24.946	42140*	33	2.262	7.312	42212	18	3.306	20.901	42264	9	15.525	1.634	42336*	31	20.908	9.304
42043*	40	12.890	24.626	42141	16	7.441	7.138	42213	18	4.950	20.122	42265	23	19.776	1.678	42337	11	22.288	9.496
42044*	39	21.678	24.528	42142*	88	14.526	7.534	42214	14	8.194	20.603	42266	14	23.370	1.853	42338	25	1.608	10.578
42045	12	24.088	24.952	42143	36	18.240	7.461	42215	25	9.678	20.294	42267	27	3.396	2.473	42339	32	2.772	10.196
42046*	37	2.538	25.104	42144	21	24.658	7.934	42216	12	13.321	20.567	42268	8	4.384	2.824	42340	11	6.221	10.426
42047	8	7.322	25.490	42145	19	7.018	8.466	42217	22	3.310	21.292	42269	11	5.550	2.528	42341*	62	6.492	10.190
42048	10	8.189	25.399	42146	21	10.817	8.609	42218	36	3.609	21.961	42270	31	7.837	2.224	42342	11	7.658	10.348
42049	12	23.284	25.009	42147	22	16.732	8.810	42219	17	5.052	21.901	42271	31	8.721	2.742	42343	14	9.426	10.699
42050	60	23.855	25.916	42148*	39	22.873	8.290	42220*	42	10.687	21.216	42272	28	9.330	2.748	42344	12	9.727	10.616

R.A. 15<sup>h</sup> 8<sup>m</sup>

Plate 1037; 1917 April 19.

Provisional Constants.

A            B            C  
 -02577 +00750 -0108

D            E            F  
 -00743 -02578 -1210

Mag. = 16.6 - 1.09√d

No.	d	x	y	No.	d	x	y	No.	d	x	y	No.	d	x	y
42101	20	1.685	0.318	42171*	39	3.194	12.730	42243	33	24.254	24.436	42319*	37	0.698	8.414
42102	30	11.948	0.905	42172	20	3.814	12.324	42244	78	2.114	25.886	42320	12	2.480	8.044
42103	21	13.080	0.642	42173	23	9.640	12.086	42245	23	13.832	25.406	42321	30	3.432	8.814
42104	36	13.391	0.338	42174	19	14.040	12.109	42246	24	25.616	25.165	42322	12	10.436	8.054
42105*	50	1.144	1.074	42175	38	15.130	12.078					42323	8	13.760	8.424
42106	15	2.426	1.440	42176*	26	15.574	12.844					42324	10	20.816	8.664
42107	12	13.462	1.744	42177	25	22.776	12.288					42325	12	24.736	8.287
42108*	92	14.932	1.388	42178	24	22.881	12.459					42326	33	0.222	9.375
42109*	54	15.028	1.506	42179	17	4.084	13.735					42327	10	2.059	9.183
42110	20	23.649	1.128	42180	23	4.592	13.562					42328	11	5.362	9.486
42111	21	25.364	1.118	42181	15	6.101	13.260								
42112	36	2.885	2.249	42182	18	6.291	13.675								
42113	12	7.072	2.541	42183	20	20.436	13.678								
42114*	36	12.998	2.079	42184	40	23.200	13.299								
42115	28	25.625	2.375	42185	46	24.874	13.995								
42116	18	0.479	3.548	42186	37	25.982	13.652								
42117	31	3.609	3.548	42187	29	14.916	14.948								
42118*	40	5.218	3.092	42188	21	16.490	14.632								
42119	22	10.307	3.257	42189*	56	18.585	14.455								
42120	24	15.252	3.990	42190	20	8.247	15.016								
42121	27	16.100	3.660	42191*	120	11.732	15.644								
42122*	51	20.062	3.750	42192	20	12.788	15.520								
42123	22	1.866	4.634	42193	21	19.151	15.335								
42124	23	2.839	4.525	42194	36	22.572	15.192								
42125	26	13.246	4.098	42195	11	7.392	16.528								
42126	38	16.167	4.309	42196	21	16.587	16.802								
42127	21	18.940	4.806	42197	12	19.787	16.591								
42128	16	24.222	4.438	42198	17	21.158	16.972								
42129	20	0.425	5.238	42199*	34	0.376	17.155								
42130	25	5.374	5.009	42200	32	6.070	17.968								
42131	12	6.734	5.513	42201*	175	8.704	17.334								
42132	14	7.244	5.054	42202*	38	8.884	17.396								
				42203	31	9.937	17.674								
				42204	25	25.938	17.300								

R.A. 15<sup>h</sup> 16<sup>m</sup>

Plate 1043; 1917 April 20.

Provisional Constants.

A            B            C  
 -02578 +00575 +0054

D            E            F  
 -00606 -02591 -1680

Mag. = 16.1 - 1.09√d

No.	d	x	y	42321	30	3.432	8.814	42393*	26	19.944	16.830
				42322	12	10.436	8.054	42394	10	22.102	16.240
42251	36	6.580	0.398	42323	8	13.760	8.424	42395	8	22.134	16.479
42252	20	12.986	0.680	42324	10	20.816	8.664	42396	22	3.854	17.394
42253	10	13.499	0.500	42325	12	24.736	8.287	42397*	38	5.402	17.958
42254	12	15.852	0.513	42326	33	0.222	9.375	42398	19	7.696	17.727
42255*	30	21.440	0.975	42327	10	2.059	9.183	42399	8	11.582	17.444
42256	11	24.429	0.718	42328	11	5.362	9.486	42400	17	13.867	17.394



42401*	40	16.805	17.444	<b>R.A. 15<sup>h</sup> 24<sup>m</sup></b> Plate 1046; 1917 May 19. <i>Provisional Constants.</i> A      B      C -02577 +00187 -1548 D      E      F -00233 -02587 -0542 Mag. = 16.5 - 1.09√d	42556	20	20.588	5.799	42628	12	5.140	16.882	42700	14	10.954	23.140
42402*	39	18.182	17.052		42557	10	0.094	6.170	42629	8	10.786	16.767	42701	22	16.112	23.360
42403	15	18.622	17.956		42558	8	1.624	6.114	42630	18	14.813	16.922	42702	10	19.582	23.078
42404	9	20.950	17.748		42559	14	9.141	6.346	42631	16	17.386	16.382	42703	11	20.870	23.708
42405	24	22.528	17.537		42560	15	11.655	6.094	42632*	37	18.195	16.694	42704*	36	22.694	23.200
42406	11	23.292	17.794		42561	11	11.696	6.884	42633	19	18.303	16.380	42705	12	0.059	24.346
42407	8	23.899	17.750		42562	10	12.750	6.363	42634*	140	20.466	16.450	42706	8	1.726	24.316
42408	21	5.573	18.111		42563	10	16.118	6.219	42635	13	22.470	16.628	42707	13	4.114	24.157
42409	19	9.133	18.022		42564*	66	16.234	6.657	42636	10	23.316	16.478	42708	19	10.284	24.382
42410	20	11.826	18.600		42565	14	16.929	6.082	42637	29	23.940	16.069	42709	11	10.890	24.165
42411	10	16.924	18.706	<b>R.A. 15<sup>h</sup> 32<sup>m</sup></b> Plate 1047; 1917 May 19. <i>Provisional Constants.</i> A      B      C -02556 +00633 -2875 D      E      F -00646 -02570 +1985 Mag. = 16.1 - 1.09√d	42566	12	17.210	6.693	42638	23	0.244	17.794	42710	14	10.906	24.279
42412	13	18.890	18.600		42567	10	22.120	6.140	42639	16	4.622	17.650	42711	9	19.082	24.186
42413	11	18.910	18.386		42568	19	23.430	6.232	42640	15	15.244	17.240	42712	10	20.090	24.192
42414	9	20.228	18.972		42569	20	7.376	7.304	42641	11	16.513	17.444	42713	16	24.826	24.285
42415	12	20.976	18.728		42570	11	9.990	7.628	42642	12	18.607	17.716	42714	12	3.762	25.117
42416	12	24.214	18.366		42571	16	11.207	7.840	42643	12	18.994	17.348	42715	13	9.510	25.898
42417	8	24.386	18.560		42572	19	14.048	7.325	42644	16	19.515	17.540	42716	12	11.936	25.282
42418	14	24.687	18.580		42573	10	15.270	7.457	42645	10	20.898	17.504	42717	12	16.574	25.333
42419	13	24.792	18.150		42574	24	16.628	7.040	42646	23	21.981	17.378	42718	9	18.430	25.432
42420	16	24.868	18.802		42575	10	18.140	7.054	42647	8	24.294	17.305				
42421*	32	6.511	19.398	<b>R.A. 15<sup>h</sup> 32<sup>m</sup></b> Plate 1047; 1917 May 19. <i>Provisional Constants.</i> A      B      C -02556 +00633 -2875 D      E      F -00646 -02570 +1985 Mag. = 16.1 - 1.09√d	42576	10	21.144	7.032	42648	12	2.410	18.820				
42422	18	18.678	19.670		42577	10	22.100	7.007	42649	12	2.512	18.392				
42423*	40	20.393	19.525		42578	17	1.430	8.111	42650	10	6.485	18.668				
42424	10	20.478	19.543		42579	17	2.333	8.098	42651	14	7.494	18.150				
42425	8	23.355	19.162		42580	12	2.379	8.526	42652*	23	7.624	18.974				
42426	11	23.650	19.568		42581	13	9.548	8.026	42653	21	9.662	18.916				
42427	24	25.180	19.908		42582	10	16.927	8.029	42654	23	9.665	18.875				
42428	8	25.340	19.496		42583	21	24.379	8.388	42655	13	19.555	18.870				
42429	18	3.110	20.372		42584	11	7.410	9.868	42656	10	1.375	19.818				
42430	13	5.289	20.388		42585	12	10.512	9.498	42657	20	2.594	19.042				
42431	12	11.918	20.888	<b>R.A. 15<sup>h</sup> 32<sup>m</sup></b> Plate 1047; 1917 May 19. <i>Provisional Constants.</i> A      B      C -02556 +00633 -2875 D      E      F -00646 -02570 +1985 Mag. = 16.1 - 1.09√d	42586	12	16.533	9.235	42658	8	3.069	19.730				
42432	24	14.262	20.559		42587	22	19.400	9.932	42659	13	5.982	19.556				
42433	27	15.526	20.080		42588	11	21.607	9.170	42660	14	8.186	19.374				
42434	11	22.858	20.064		42589	11	24.670	9.442	42661*	33	13.226	19.501				
42435	11	2.200	21.752		42590	43	25.764	9.307	42662*	28	13.272	19.915				
42436	9	2.588	21.208		42591	27	6.788	10.434	42663	15	14.766	19.284				
42437	31	5.302	21.449		42592	27	9.808	10.014	42664	10	15.980	19.625				
42438	13	6.880	21.708		42593	17	13.425	10.256	42665*	33	19.032	19.087				
42439	13	22.650	21.601		42594	10	1.410	11.380	42666	19	21.518	19.980				
42440	10	0.741	22.350		42595	10	3.592	11.730	42667*	26	21.934	19.174				
42441	10	1.399	22.173	<b>R.A. 15<sup>h</sup> 32<sup>m</sup></b> Plate 1047; 1917 May 19. <i>Provisional Constants.</i> A      B      C -02556 +00633 -2875 D      E      F -00646 -02570 +1985 Mag. = 16.1 - 1.09√d	42596	9	21.592	11.252	42668	10	22.548	19.180				
42442	12	8.490	22.297		42597	16	0.654	12.973	42669	23	24.232	19.203				
42443	8	9.688	22.536		42598	21	1.272	12.466	42670	9	25.208	19.645				
42444	20	13.297	22.620		42599	20	2.733	12.078	42671	9	0.591	20.320				
42445	11	13.695	22.450		42600	20	22.137	12.975	42672	21	2.912	20.145				
42446	20	17.172	22.285		42601	39	23.826	12.882	42673*	74	4.546	20.284				
42447	11	24.416	22.810		42602	13	6.080	13.621	42674	13	12.934	20.841				
42448	10	2.226	23.370		42603	16	7.880	13.920	42675	26	17.402	20.800				
42449	10	2.532	23.782		42604	10	8.698	13.388	42676	10	18.782	20.680				
42450	31	4.681	23.170		42605	10	10.080	13.308	42677*	41	20.320	20.398				
42451	12	13.550	23.779	<b>R.A. 15<sup>h</sup> 32<sup>m</sup></b> Plate 1047; 1917 May 19. <i>Provisional Constants.</i> A      B      C -02556 +00633 -2875 D      E      F -00646 -02570 +1985 Mag. = 16.1 - 1.09√d	42606*	64	11.648	13.280	42678	17	23.327	20.766				
42452	8	13.758	23.437		42607	10	15.324	13.816	42679	15	0.396	21.856				
42453	11	1.244	24.521		42608	12	16.310	13.846	42680	15	7.106	21.560				
42454	30	2.238	24.546		42609	12	18.866	13.928	42681	20	9.832	21.892				
42455	11	11.862	24.454		42610*	60	20.376	13.324	42682	11	10.014	21.305				
42456	9	22.294	24.084		42611	14	21.606	13.882	42683	9	20.469	21.420				
42457	10	25.983	24.887		42612	8	24.300	13.463	42684	9	21.962	21.828				
42458	10	2.488	25.916		42613	11	0.295	14.394	42685*	39	22.874	21.009				
42459	14	3.610	25.262		42614	19	10.974	14.961	42686	10	24.550	21.033				
42460	26	9.298	25.954		42615	11	16.642	14.018	42687	9	4.491	22.785				
42461	26	11.006	25.213	<b>R.A. 15<sup>h</sup> 32<sup>m</sup></b> Plate 1047; 1917 May 19. <i>Provisional Constants.</i> A      B      C -02556 +00633 -2875 D      E      F -00646 -02570 +1985 Mag. = 16.1 - 1.09√d	42616	12	18.232	14.349	42688	20	7.266	22.388				
42462	24	11.320	25.782		42617	11	23.184	14.560	42689*	45	10.250	22.680				
42463	24	15.448	25.372		42618	11	24.192	14.500	42690	11	12.957	22.370				
42464	12	17.900	25.302		42619	10	24.715	14.460	42691	11	14.163	22.366				
42465	10	17.902	25.428		42620	13	0.644	15.172	42692	14	15.766	22.468				
42466	12	24.792	25.834		42621*	44	7.054	15.962	42693	27	16.854	22.876				
					42622	19	17.446	15.183	42694	43	17.942	22.206				
					42623	11	20.490	15.840	42695*	100	17.982	22.216				
					42624	19	20.746	15.661	42696*	30	19.900	22.432				
					42625	12	21.103	15.999	42697	14	19.950	22.890				
					42626*	35	24.276	15.425	42698	10	2.172	23.053				
					42627	14	4.314	16.643	42699	10	9.904	23.237				



42780	10	1.190	4.799	42852	12	22.237	10.027	42924	24	2.140	19.488	42996	36	8.056	25.752	43094	11	4.680	4.274
42781	9	2.680	4.586	42853	25	23.287	10.266	42925	12	7.094	19.028	42997	28	8.504	25.090	43095	23	6.364	4.234
42782	22	3.787	4.192	42854	17	24.045	10.883	42926	21	8.793	19.163	42998	26	18.496	25.251	43096	19	8.899	4.391
42783	17	8.045	4.662	42855	10	5.607	11.484	42927	10	10.240	19.554	42999	9	18.632	25.879	43097	12	9.955	4.995
42784	18	10.885	4.882	42856*	28	9.614	11.004	42928*	82	14.371	19.596	43000	34	21.418	25.496	43098	12	11.300	4.120
42785	16	11.832	4.882	42857*	46	12.414	11.767	42929	8	15.374	19.563	43001	22	21.572	25.832	43099	10	14.912	4.920
42786	29	12.369	4.179	42858	12	17.524	11.194	42930	9	17.646	19.452					43100	9	17.626	4.962
42787	13	16.326	4.876	42859	18	7.604	12.288	42931	8	20.325	19.117					43101	14	23.484	4.194
42788	11	20.324	4.634	42860*	100	15.662	12.452	42932	18	20.364	19.882					43102	20	2.366	5.950
42789	9	20.537	4.818	42861	19	21.816	12.394	42933	11	20.576	19.692					43103	10	6.480	5.666
42790	10	22.511	4.272	42862	32	1.636	13.174	42934	10	20.891	19.256					43104	16	6.672	5.819
42791	25	22.728	4.014	42863	8	6.976	13.372	42935*	35	20.946	19.230					43105	12	7.870	5.750
42792	18	4.060	5.852	42864	21	7.108	13.017	42936	12	22.564	19.306					43106	12	13.210	5.358
42793	11	4.730	5.790	42865	15	8.502	13.348	42937	9	23.898	19.982					43107	12	18.093	5.076
42794*	36	5.781	5.696	42866	8	8.530	13.429	42938	41	25.285	19.138					43108	10	18.226	5.456
42795	11	6.125	5.265	42867	10	9.648	13.967	42939	8	0.630	20.214					43109	13	18.536	5.686
42796	8	6.334	5.512	42868*	39	12.425	13.915	42940*	29	5.092	20.992					43110	20	21.205	5.363
42797	25	7.100	5.388	42869	27	12.690	13.018	42941	10	6.122	20.948					43111*	49	21.895	5.566
42798	23	8.316	5.230	42870	15	13.984	13.028	42942	18	12.586	20.544					43112	11	22.046	5.969
42799	12	8.552	5.860	42871	13	20.666	13.816	42943	20	13.244	20.766					43113	12	0.578	6.374
42800	10	9.849	5.740	42872	29	20.778	13.687	42944	14	14.952	20.238					43114	38	0.932	6.804
42801	32	11.042	5.802	42873	8	22.382	13.663	42945	11	15.365	20.633					43115*	40	1.572	6.182
42802	9	11.532	5.182	42874	10	22.638	13.406	42946	8	19.192	20.188					43116	9	2.338	6.707
42803	17	12.696	5.178	42875	11	2.030	14.780	42947	17	19.538	20.045					43117*	26	10.211	6.075
42804	31	20.064	5.370	42876	26	8.151	14.846	42948	13	19.602	20.124					43118	12	10.352	6.996
42805	26	24.431	5.932	42877	16	13.498	14.758	42949	22	19.909	20.214					43119	9	10.776	6.372
42806	25	1.138	6.530	42878	8	14.661	14.586	42950	23	20.222	20.034					43120	15	13.634	6.599
42807	17	1.613	6.450	42879	8	15.377	14.095	42951	8	20.508	20.532					43121	10	14.298	6.106
42808	14	5.645	6.314	42880	17	18.462	14.342	42952	13	22.062	20.531					43122	11	23.128	6.487
42809	15	8.448	6.210	42881	13	20.018	14.918	42953	24	24.933	20.379					43123	18	23.260	6.734
42810	31	12.060	6.466	42882*	45	23.994	14.380	42954	8	25.132	20.094					43124	10	9.267	7.186
42811	8	14.038	6.344	42883	39	25.130	14.725	42955	23	25.832	20.348					43125	15	15.412	7.328
42812*	31	21.884	6.833	42884*	37	2.125	15.706	42956*	35	0.807	21.314					43126	14	19.159	7.392
42813	11	22.639	6.336	42885*	33	5.650	15.190	42957	22	1.258	21.064					43127	23	4.689	8.856
42814	37	22.986	6.769	42886	11	6.775	15.926	42958	10	2.486	21.308					43128	8	5.798	8.440
42815*	37	23.635	6.154	42887	13	13.440	15.931	42959*	24	5.437	21.182					43129	23	7.870	8.170
42816	15	4.375	7.456	42888	27	18.608	15.358	42960	16	7.488	21.146					43130	15	9.353	8.861
42817	13	4.821	7.852	42889	28	25.470	15.509	42961	14	7.703	21.126					43131	11	12.300	8.208
42818*	34	5.660	7.795	42890	10	0.337	16.938	42962	18	8.298	21.006					43132	19	22.283	8.948
42819	8	10.939	7.850	42891	34	1.798	16.358	42963	10	11.808	21.171					43133	19	25.038	8.310
42820	10	13.764	7.138	42892	19	3.900	16.424	42964	13	13.422	21.822					43134	14	3.470	9.340
42821	19	18.264	7.178	42893	13	6.040	16.858	42965	8	21.474	21.786					43135	12	5.998	9.890
42822	29	19.588	7.451	42894*	30	6.395	16.274	42966	8	2.118	22.662					43136	11	6.012	9.231
42823	12	22.462	7.330	42895	9	7.923	16.480	42967	22	10.498	22.543					43137	10	6.568	9.804
42824	20	2.118	8.674	42896	8	10.775	16.283	42968	11	11.813	22.027					43138	8	7.596	9.334
42825	9	3.150	8.486	42897	13	12.000	16.812	42969	10	15.019	22.016					43139	16	8.808	9.950
42826	9	6.834	8.689	42898	18	17.488	16.340	42970*	38	15.096	22.492					43140	9	15.384	9.770
42827	20	6.968	8.912	42899	13	21.318	16.104	42971	20	15.178	22.164					43141	13	20.896	9.310
42828	31	7.676	8.765	42900	21	23.493	16.814	42972	24	17.068	22.970					43142	11	0.224	10.072
42829	8	9.618	8.743	42901*	80	24.044	16.909	42973	35	17.372	22.990					43143	18	1.276	10.299
42830	19	9.870	8.812	42902	8	2.176	17.588	42974*	41	17.822	22.202					43144	13	2.044	10.900
42831	8	11.189	8.115	42903	21	8.238	17.659	42975	11	18.044	22.249					43145*	80	11.612	10.246
42832	10	13.030	8.684	42904	18	13.184	17.450	42976	8	21.609	22.445					43146	16	13.300	10.460
42833	29	13.398	8.134	42905*	72	15.922	17.508	42977	9	25.612	22.214					43147	25	13.782	10.397
42834	10	16.634	8.686	42906	10	16.228	17.046	42978*	36	0.662	23.508					43148	17	14.674	10.351
42835	11	17.432	8.270	42907	25	16.374	17.252	42979	8	3.222	23.685					43149	8	14.964	10.420
42836	15	17.524	8.413	42908*	55	18.179	17.310	42980	11	10.764	23.358					43150*	51	16.000	10.569
42837	8	20.592	8.528	42909*	80	18.405	17.949	42981	9	21.376	23.800					43151	15	25.365	10.394
42838	11	20.690	8.252	42910	35	22.074	17.261	42982	28	22.146	23.243					43152	11	25.630	10.930
42839	10	1.640	9.456	42911	8	25.525	17.952	42983	33	22.654	23.520					43153	11	10.826	11.325
42840	11	2.426	9.720	42912	10	0.493	18.333	42984	23	2.812	24.560					43154	9	12.776	11.535
42841*	36	3.516	9.572	42913	10	4.148	18.330	42985	10	4.834	24.963					43155	12	13.100	11.717
42842	34	20.376	9.064	42914	12	5.504	18.456	42986	23	9.682	24.854					43156	24	13.418	11.610
42843	21	25.492	9.335	42915*	32	9.294	18.495	42987*	31	9.982	24.695					43157	8	15.048	11.800
42844	10	5.111	10.373	42916	14	12.984	18.622	42988	8	13.125	24.572					43158*	38	20.577	11.552
42845*	34	7.562	10.156	42917*	37	14.559	18.079	42989	14	13.826	24.304					43159	12	20.872	11.154
42846	11	7.966	10.670	42918	14	16.466	18.450	42990*	39	13.992	24.714					43160	8	21.887	11.130
42847	30	10.722	10.576	42919	10	17.474	18.724	42991	31	16.182	24.527					43161	14	22.298	11.850
42848	15	11.176	10.846	42920	12	17.848	18.718	42992	17	20.475	24.910					43162	15	23.736	11.882
42849	28	12.620	10.904	42921	10	22.248	18.89												



R.A. 15<sup>h</sup> 48<sup>m</sup>

Plate 1038; 1917 April 19.

Provisional Constants.

A	B	C
-02579	+00379	+1139

D	E	F
-00405	-02588	-1546

Mag. = 15.9 - 1.09√d

No.	d	x	y
43351*	37	4.108	0.664
43352	42	19.169	0.366
43353	33	20.160	0.900
43354	27	23.162	0.704
43355	26	7.036	1.728
43356	22	8.706	1.919
43357	17	9.345	1.316
43358	26	15.894	1.936
43359	20	17.190	1.567
43360	13	17.519	1.996
43361	21	18.280	1.100
43362*	32	19.530	1.373
43363	18	19.930	1.554
43364	14	21.658	1.716
43365	19	21.866	1.884
43366	36	4.074	2.669
43367*	64	8.735	2.382
43368	13	17.581	2.598
43369	19	22.199	2.654
43370	37	25.644	2.967
43371	20	0.928	3.275
43372	15	5.328	3.161
43373	13	11.296	3.872
43374	33	12.699	3.481
43375	32	15.648	3.284
43376	20	16.379	3.535
43377	17	17.412	3.754
43378	18	18.404	3.721
43379	16	7.792	4.520
43380	20	9.354	4.604
43381	14	13.156	4.614
43382	14	17.054	4.144
43383	15	18.830	4.460
43384	34	19.876	4.446
43385	20	20.362	4.248
43386	15	22.936	4.858
43387	17	23.317	4.078
43388	33	25.531	4.686
43389	19	0.084	5.907
43390*	35	4.204	5.644
43391	20	9.714	5.764
43392	20	11.150	5.944
43393	17	24.531	5.657
43394	18	1.174	6.416
43395	21	1.306	6.664
43396	20	4.428	6.650
43397	19	7.906	6.972
43398	16	9.800	6.862
43399	12	10.785	6.611
43400	24	14.296	6.720
43401	21	15.220	6.869
43402	16	17.782	6.155
43403*	36	17.976	6.577
43404	17	21.231	6.470
43405	17	9.176	7.610

43166	24	10.836	12.324	43238	17	20.429	19.386	43406	20	9.844	7.203	43478	24	2.652	14.524
43167	11	13.638	12.332	43239	9	21.810	19.541	43407	13	16.942	7.212	43479	20	9.412	14.458
43168	16	15.017	12.236	43240	17	23.386	19.502	43408	13	17.100	7.816	43480	13	10.886	14.782
43169	10	20.093	12.201	43241*	32	24.566	19.932	43409	15	17.694	7.690	43481	18	14.058	14.694
43170	21	21.993	12.058	43242	11	25.408	19.475	43410	16	18.214	7.080	43482	32	14.523	14.616
43171	14	22.380	12.964	43243	24	25.728	19.866	43411	22	21.217	7.818	43483	12	15.324	14.404
43172	12	25.221	12.466	43244	12	0.181	20.577	43412	27	21.218	7.825	43484	21	18.880	14.830
43173	8	0.414	13.704	43245	17	3.048	20.386	43413	21	0.350	8.884	43485	12	20.836	14.312
43174	11	0.666	13.446	43246	20	3.948	20.344	43414	16	1.310	8.462	43486	13	21.523	14.674
43175	11	5.816	13.718	43247	9	4.133	20.850	43415	21	3.098	8.228	43487	20	23.016	14.215
43176	18	8.870	13.342	43248	10	5.129	20.479	43416*	62	6.930	8.252	43488	23	0.734	15.004
43177	14	13.388	13.566	43249	18	5.386	20.224	43417*	46	13.300	8.419	43489	15	5.838	15.341
43178*	34	13.740	13.283	43250	18	7.292	20.332	43418	14	17.763	8.130	43490	16	16.070	15.602
43179*	29	20.990	13.856	43251	9	7.522	20.688	43419	26	20.065	8.118	43491	13	20.084	15.984
43180*	65	2.032	14.402	43252	11	9.176	20.585	43420	17	20.084	8.405	43492	17	20.970	15.050
43181*	47	3.174	14.732	43253	14	13.146	20.628	43421	21	20.165	8.076	43493	13	23.835	15.200
43182*	22	5.250	14.874	43254	9	17.776	20.765	43422	11	2.795	9.400	43494	30	0.936	16.156
43183	14	7.802	14.332	43255	8	19.518	20.892	43423	12	6.077	9.404	43495	12	5.382	16.495
43184	17	18.282	14.730	43256	23	19.682	20.910	43424	14	14.770	9.556	43496	36	6.560	16.774
43185	19	24.544	14.604	43257	13	20.172	20.682	43425	15	15.235	9.508	43497	15	7.314	16.935
43186	21	3.522	15.510	43258	9	23.647	20.364	43426	15	17.036	9.180	43498	19	7.458	16.554
43187	9	11.700	15.630	43259	10	7.546	21.410	43427	12	19.714	9.264	43499	18	16.867	16.389
43188*	20	13.426	15.512	43260	13	7.814	21.042	43428	16	21.300	9.943	43500*	20	17.792	16.193
43189	8	19.290	15.298	43261*	24	9.884	21.314	43429	12	0.150	10.900	43501	12	18.744	16.400
43190	20	22.624	15.070	43262	9	20.824	21.630	43430	15	3.182	10.406	43502	15	19.850	16.138
43191	18	1.565	16.840	43263	15	21.810	21.327	43431	16	3.442	10.309	43503	18	23.790	16.299
43192*	100	2.108	16.929	43264	13	22.005	21.656	43432	16	3.710	10.844	43504	16	3.950	17.590
43193	8	4.092	16.762	43265	10	23.542	21.406	43433	34	6.344	10.103	43505	17	5.312	17.776
43194	13	9.837	16.600	43266	20	25.896	21.505	43434	21	6.641	10.915	43506	20	6.384	17.690
43195*	23	14.851	16.232	43267	16	25.908	21.447	43435	18	8.364	10.833	43507	18	9.132	17.400
43196	11	20.232	16.922	43268	11	3.751	22.215	43436	38	9.902	10.968	43508	14	11.962	17.577
43197	26	22.816	16.224	43269	20	5.192	22.423	43437	13	10.803	10.054	43509	19	24.111	17.226
43198	29	0.150	17.304	43270	18	9.720	22.986	43438*	38	11.093	10.631	43510	14	1.030	18.516
43199	23	5.164	17.010	43271	19	9.938	22.175	43439	16	13.576	10.364	43511	12	12.868	18.272
43200	9	7.490	17.246	43272	10	13.426	22.628	43440	13	14.443	10.666	43512	16	13.087	18.308
43201	14	7.521	17.630	43273	18	15.486	22.553	43441	34	21.625	10.540	43513	12	16.478	18.084
43202*	48	8.720	17.330	43274	9	20.125	22.850	43442	20	22.114	10.812	43514	17	21.782	18.936
43203	8	10.097	17.406	43275*	29	20.594	22.623	43443	20	22.442	10.128	43515	15	23.986	18.298
43204	8	11.062	17.063	43276	10	21.637	22.904	43444	14	23.813	10.629	43516	20	24.258	18.365
43205	17	12.460	17.293	43277	18	23.215	22.102	43445	25	0.080	11.998	43517	15	24.394	18.476
43206	13	14.083	17.076	43278	24	0.296	23.286	43446	21	0.384	11.788	43518	19	24.652	18.182
43207	11	14.970	17.648	43279	33	0.806	23.556	43447	18	1.825	11.808	43519	19	1.531	19.431
43208	10	16.496	17.666	43280	10	2.291	23.022	43448	18	3.220	11.836	43520	13	2.488	19.200
43209	16	17.377	17.626	43281*	38	4.638	23.582	43449	14	3.959	11.686	43521*	34	2.715	19.851
43210*	32	18.317	17.227	43282	10	11.002	23.460	43450	23	6.048	11.996	43522	18	3.556	19.385
43211	9	20.968	17.103	43283	10	14.879	23.426	43451	17	6.649	11.708	43523	29	3.876	19.775
43212	13	25.818	17.678	43284	16	15.818	23.824	43452	14	12.298	11.150	43524	14	7.621	19.240
43213	10	0.342	18.932	43285	10	16.486	23.437	43453	17	22.545	11.475	43525	21	8.884	19.941
43214	10	6.662	18.751	43286	10	17.559	23.550	43454	16	24.990	11.906	43526	25	9.772	19.896
43215	14	7.164	18.918	43287	21	17.652	23.924	43455	17	0.474	12.902	43527	17	14.058	19.584
43216*	38	8.352	18.208	43288	20	20.756	23.151	43456	18	3.312	12.379	43528	20	14.988	19.442
43217	10	8.558	18.980	43289	10	1.172	24.216	43457	13	3.524	12.886	43529	15	15.765	19.861
43218	10	10.184	18.600	43290	20	3.303	24.759	43458	15	4.445	12.591	43530	16	21.114	19.204
43219	18	12.974	18.716	43291	26	5.544	24.730	43459	11	5.615	12.084	43531	14	22.576	19.264
43220	10	17.935	18.425	43292	21	5.975	24.218	43460	16	14.675	12.658	43532	22	24.565	19.218
43221	13	18.260	18.070	43293	21	7.308	24.490	43461	20	20.528	12.952	43533	13	24.866	19.746
43222*	22	19.942	18.077	43294	22	7.608	24.403	43462	33	21.418	12.230	43534	15	5.126	20.524
43223	10	20.018	18.627	43295	14	12.712	24.869	43463	22	23.501	12.319	43535*	39	5.382	20.763
43224	20	20.028	18.986	43296	19	18.969	24.022	43464	17	23.658	12.082	43536	20	7.724	20.896
43225*	25	21.588	18.598	43297	14	20.716	24.494	43465	12	5.313	13.223	43537	11	12.324	20.282
43226	10	0.666	19.344	43298	13	22.436	24.528	43466	16	7.568	13.714	43538	14	17.311	20.142
43227	10	2.958	19.532	43299*	47	22.490	24.066	43467*	40	11.648	13.640	43539	21	18.771	20.916
43228*	38	3.385	19.144	43300	11	25.733	24.997	43468	15	14.066	13.289	43540	18	19.132	20.706
43229	14	4.958	19.214	43301	15	25.864	24.333	43469*	24	14.372	13.539	43541	15	22.144	20.714
43230	13	6.040	19.678	43302	14	6.970	25.590	43470*	110	16.220	13.488	43542	21	23.370	20.277
43231	9	10.766	19.134	43303	10	11.086	25.541	43471	19	17.806	13.205	43543	17	24.528	20.889
43232	8	11.327	19.984	43304	10	12.740	25.154	43472	17	18.422	13.067	43544	20	0.170	21.598
43233	9	11.438	19.915	43305	22	13.658	25.430	43473	17	19.395	13.270	43545	12	1.702	21.334
43234	8	13.096	19.994	43306	40	19.780	25.342	43474	12	21.254	13.138	43546	23	4.056	21.413
43235	10	16.088	19.779	43307	45	21.247	25.977	43475	16	25.074	13.176	43547	20	4.068	21.356
43236	21	17.064	19.932	43308	24	23.080	25.646	43476	20	25.364	13.035	43548	19	4.400	21.972
43237*	27	18.528	19.029	43309	14	23.695	25.474	43477	14	1.040	14.105	43549	21	4.482	21.776



43550	16	6.439	21.385	43604	11	11.130	0.394	43676	22	1.106	12.733	43748	10	9.790	20.812	43804	31	12.386	0.542
43551	17	12.464	21.564	43605*	46	16.754	0.908	43677	10	1.260	12.496	43749	11	15.267	20.748	43805	12	17.675	0.091
43552	16	16.210	21.450	43606	20	18.222	0.283	43678	12	2.590	12.296	43750	13	23.254	20.702	43806*	65	18.868	0.524
43553	19	23.735	21.958	43607	17	24.840	0.620	43679	10	3.640	12.886	43751	16	24.920	20.378	43807	41	24.594	0.129
43554	18	23.856	21.266	43608	9	0.382	1.040	43680	8	6.248	12.363	43752	9	1.608	21.672	43808	9	0.430	1.668
43555	21	1.384	22.032	43609	19	0.580	1.126	43681*	25	10.544	12.900	43753	11	2.277	21.286	43809	31	3.338	1.618
43556	16	5.299	22.422	43610	10	17.565	1.880	43682	10	18.282	12.590	43754	13	6.052	21.574	43810	17	3.761	1.611
43557	16	6.351	22.435	43611	11	21.285	1.578	43683	10	18.854	12.864	43755*	34	15.965	21.124	43811	19	9.316	1.098
43558*	160	11.568	22.638	43612	10	24.140	1.845	43684	18	2.982	13.420	43756	11	19.058	21.122	43812	8	9.599	1.926
43559	21	13.706	22.236	43613	28	25.486	1.550	43685	8	16.436	13.824	43757	8	20.542	21.327	43813	12	10.992	1.701
43560	17	14.077	22.576	43614	16	25.910	1.546	43686	10	17.128	13.730	43758	18	21.316	21.742	43814	8	11.277	1.060
43561	12	14.558	22.256	43615	10	6.504	2.344	43687	10	18.873	13.350	43759	10	21.331	21.119	43815	33	12.968	1.080
43562	20	17.078	22.886	43616	15	6.857	2.187	43688*	42	24.792	13.923	43760	12	21.609	21.998	43816*	81	13.010	1.782
43563	21	21.224	22.218	43617	11	7.364	2.655	43689	19	0.652	14.636	43761	12	1.500	22.368	43817	11	15.889	1.090
43564	14	22.769	22.562	43618	10	7.874	2.641	43690	12	3.962	14.784	43762	10	3.157	22.543	43818	11	21.347	1.788
43565	13	25.394	22.162	43619	11	13.695	2.888	43691*	60	13.829	14.747	43763	10	4.092	22.018	43819	19	3.824	2.400
43566	13	11.658	23.705	43620	14	17.194	2.679	43692	11	14.876	14.934	43764	20	7.723	22.550	43820	13	5.108	2.844
43567	17	11.750	23.715	43621	25	20.237	2.352	43693	19	19.737	14.083	43765	16	8.490	22.842	43821*	45	5.878	2.140
43568	16	15.089	23.718	43622	9	25.714	2.307	43694	10	20.340	14.142	43766	10	9.604	22.360	43822	8	7.850	2.238
43569*	31	16.226	23.678	43623	15	25.960	2.335	43695*	23	21.185	14.554	43767	10	10.152	22.940	43823	11	23.084	2.947
43570	17	16.282	23.986	43624*	28	3.097	3.348	43696	10	25.385	14.366	43768	20	13.060	22.745	43824	25	4.369	3.134
43571	15	17.562	23.730	43625	17	10.721	3.069	43697	10	25.744	14.384	43769	10	24.410	22.938	43825	26	7.670	3.090
43572	15	17.652	23.418	43626	21	15.757	3.657	43698*	31	4.220	15.830	43770	10	7.235	23.582	43826	10	8.291	3.108
43573	14	19.235	23.208	43627	11	0.790	4.496	43699	10	4.612	15.951	43771	10	7.344	23.142	43827	12	16.864	3.370
43574	18	20.518	23.606	43628	13	7.064	4.126	43700	8	6.430	15.672	43772	10	7.398	23.432	43828*	39	0.496	5.654
43575	20	21.092	23.350	43629	14	7.075	4.196	43701	16	7.672	15.238	43773	11	9.150	23.937	43829*	50	3.307	5.548
43576	20	0.625	24.463	43630	19	21.298	4.350	43702	8	11.830	15.395	43774	17	12.174	23.136	43830	9	17.442	5.303
43577*	52	0.666	24.004	43631*	76	21.614	4.074	43703*	21	18.111	15.546	43775	9	13.972	23.508	43831	10	25.858	5.578
43578	23	4.051	24.242	43632	13	0.422	5.286	43704	12	20.850	15.392	43776	10	15.452	23.550	43832	37	1.038	6.358
43579	19	4.572	24.124	43633	23	3.010	5.070	43705	10	1.461	16.708	43777	9	23.066	23.136	43833	9	5.174	6.560
43580	16	5.436	24.759	43634	10	9.050	5.861	43706	9	3.866	16.122	43778	30	25.737	23.926	43834	32	23.580	6.832
43581	15	6.818	24.728	43635	13	10.740	5.781	43707	16	7.728	16.808	43779	11	0.530	24.652	43835	13	18.419	7.502
43582	20	8.676	24.308	43636	10	15.222	5.280	43708*	48	17.900	16.191	43780	10	2.267	24.716	43836*	47	24.894	7.580
43583*	34	10.100	24.171	43637	15	19.974	5.641	43709	21	18.701	16.850	43781	11	4.034	24.942	43837	21	2.243	8.636
43584	16	11.842	24.257	43638*	35	22.588	5.540	43710	12	1.798	17.630	43782	15	9.035	24.396	43838	25	6.940	8.965
43585*	38	13.042	24.372	43639	50	25.405	5.473	43711*	32	20.913	17.077	43783	15	9.390	24.893	43839	20	0.249	9.214
43586	19	14.424	24.942	43640	13	4.804	6.367	43712	9	22.534	17.482	43784	18	9.394	24.417	43840	25	1.980	9.220
43587	15	14.769	24.677	43641	21	15.971	6.915	43713*	82	23.466	17.446	43785	10	12.486	24.060	43841	16	5.166	9.966
43588	23	14.844	24.972	43642	10	18.382	6.892	43714	14	24.172	17.142	43786	11	14.048	24.510	43842	10	5.900	9.591
43589	21	21.420	24.516	43643	34	23.123	6.250	43715	9	24.519	17.466	43787	9	16.020	24.706	43843*	86	10.586	9.465
43590	16	22.726	24.228	43644	13	3.726	7.640	43716	16	25.318	17.098	43788*	42	20.998	24.750	43844	18	20.630	9.405
43591	18	24.464	24.319	43645	12	8.654	7.236	43717	10	1.690	18.700	43789	10	24.502	24.416	43845	8	22.464	9.306
43592	32	1.274	25.576	43646	14	12.565	7.816	43718	14	1.960	18.764	43790	8	24.676	24.547	43846	8	0.930	10.430
43593	24	1.885	25.398	43647	19	14.126	7.674	43719	11	2.100	18.878	43791	9	3.087	25.684	43847	9	1.349	10.222
43594	20	7.865	25.900	43648	10	14.768	7.800	43720	13	2.354	18.575	43792	15	3.123	25.944	43848	13	9.556	10.112
43595	23	11.688	25.696	43649	14	15.460	7.711	43721	9	9.660	18.018	43793	9	10.800	25.435	43849	30	10.712	10.080
43596	23	12.732	25.568	43650	13	16.980	7.027	43722*	26	13.390	18.592	43794	10	15.410	25.455	43850	8	18.730	10.852
43597	20	14.054	25.263	43651	10	19.760	7.221	43723	12	15.084	18.322	43795	10	18.300	25.144	43851*	71	19.040	10.235
43598	42	20.570	25.784	43652	13	20.520	7.096	43724	10	15.145	18.661					43852	13	19.382	10.202
43599	27	25.298	25.562	43653	9	23.899	7.252	43725	11	17.294	18.479					43853	10	0.881	11.320
				43654	14	3.667	8.082	43726*	67	18.658	18.438					43854	10	0.922	11.102
				43655	11	4.526	8.478	43727	10	19.542	18.200					43855	16	3.510	11.708
				43656	21	5.183	8.393	43728	14	21.944	18.388					43856	10	5.992	11.260
				43657	8	14.614	8.276	43729	10	22.613	18.120					43857	12	6.821	11.755
				43658	13	21.670	8.310	43730*	200	22.607	18.906					43858	20	7.956	11.035
				43659	18	24.292	8.547	43731*	39	24.884	18.654					43859	10	17.316	11.530
				43660*	30	10.349	9.020	43732	12	0.296	19.694					43860	8	7.704	12.190
				43661	10	15.312	9.948	43733	18	2.285	19.614					43861	10	16.372	12.900
				43662	9	21.306	9.764	43734	10	8.974	19.765					43862	15	15.356	13.029
				43663	18	22.291	9.999	43735	20	9.176	19.818					43863	12	18.263	13.351
				43664	24	24.020	9.128	43736	18	10.256	19.813					43864	31	24.872	13.454
				43665	15	0.013	10.558	43737	19	11.290	19.626					43865*	41	2.819	14.002
				43666	8	12.814	10.950	43738*	80	16.218	19.292					43866	26	5.114	14.780
				43667*	42	18.702	10.667	43739	10	22.636	19.332					43867	16	5.166	14.603
				43668	11	22.937	10.998	43740	12	25.184	19.838					43868*	73	11.447	14.868
				43669	8	4.476	11.546	43741	20	1.107	20.693					43869*	31	15.154	14.102
				43670	12	5.902	11.994	43742											



43876	20	14.036	15.524	<b>R.A. 16<sup>h</sup> 12<sup>m</sup></b> Plate 1055; 1917 May 20. <i>Provisional Constants.</i> A B C -02542 +00689 -1092 D E F -00690 -02580 +1232 $Mag. = 16.2 - 1.09 \sqrt{d}$	44005*	78	17.576	7.830	44077	25	2.044	25.354	44146	11	2.626	7.678
43877	16	18.844	15.892		44006	34	20.879	7.143	44078	11	7.725	25.733	44147	10	3.538	7.856
43878	17	20.014	15.439		44007	8	23.121	7.127	44079	13	23.724	25.750	44148	10	4.555	7.220
43879*	74	20.788	15.390		44008	8	14.042	8.813					44149*	43	5.038	7.256
43880	14	6.728	16.644		44009*	32	18.292	8.366					44150	31	5.219	7.122
43881	8	13.065	16.362		44010	9	20.631	8.248					44151	11	5.462	7.339
43882*	80	19.765	16.282		44011	26	21.926	8.248					44152	12	8.672	7.072
43883	21	24.832	16.252		44012	10	0.287	9.620					44153	15	10.758	7.955
43884*	80	1.538	17.546		44013	20	18.782	9.338					44154	11	19.326	7.150
43885	15	2.247	17.231		44014	8	19.608	9.634					44155	12	22.082	7.202
43886	14	3.393	17.170	<b>R.A. 16<sup>h</sup> 20<sup>m</sup></b> Plate 1215; 1918 Mar. 13. <i>Provisional Constants.</i> A B C -02598 +00598 -2815 D E F -00609 -02591 +2184 $Mag. = 16.6 - 1.09 \sqrt{d}$	44015	20	21.702	10.186					44156	18	22.168	7.544
43887	15	8.998	17.300		44016*	30	4.036	11.933					44157	23	13.982	8.146
43888	12	9.758	17.585		44017	24	12.334	11.115					44158	18	18.000	8.260
43889	25	11.577	17.665		44018	27	18.560	11.789					44159	30	3.800	9.188
43890	9	11.626	17.649		44019	26	4.512	12.610					44160	14	3.924	9.002
43891	15	12.944	17.322		44020	17	17.202	12.156					44161	12	4.068	9.156
43892	9	23.724	17.968		44021	19	20.766	12.076					44162	21	5.997	9.161
43893	10	24.632	17.022		44022	15	23.275	12.466					44163	11	6.378	9.888
43894	39	24.903	17.240		44023	31	2.720	13.754					44164	14	7.514	9.036
43895	14	0.036	18.508		44024	10	19.671	13.870					44165	16	7.966	9.560
43896*	220	0.693	18.998		44025	12	1.173	14.132					44166	16	8.532	9.094
43897	10	0.698	18.232		44026	11	14.236	14.972					44167	24	9.380	9.002
43898*	42	2.978	18.733		44027	8	22.470	14.751					44168	14	22.434	9.232
43899	14	4.246	18.954		44028	29	24.186	14.206					44169	15	7.616	10.094
43900	8	19.188	18.606		44029	10	1.411	15.228					44170	14	10.010	10.340
43901	10	25.735	18.890		44030	22	13.965	15.053					44171	30	13.498	10.752
43902	14	3.298	19.912		44031	22	15.386	15.575					44172	11	16.438	10.745
43903	9	5.506	19.530		44032	12	16.902	15.221					44173	11	0.205	11.152
43904	10	18.784	19.305		44033	12	19.010	15.952					44174	11	1.428	11.124
43905	11	22.209	19.324		44034	24	2.700	16.553					44175	14	1.732	11.153
43906	13	1.378	20.804		44035	8	5.764	16.477					44176	13	2.723	11.504
43907	13	3.044	20.454		44036	8	9.282	16.432					44177	27	3.682	11.262
43908	10	11.280	20.901		44037	15	11.814	16.136					44178	16	9.553	11.984
43909	20	14.046	20.346		44038	11	2.502	17.324					44179	15	10.009	11.856
43910	9	23.274	20.659		44039	35	2.774	17.540					44180	28	10.189	11.437
43911	8	0.852	21.885		44040	18	4.857	17.026					44181	13	12.671	11.385
43912*	36	7.315	21.110		44041	14	12.880	17.664					44182*	44	14.846	11.678
43913	13	9.556	21.740		44042	36	15.414	17.783					44183	11	18.673	11.241
43914	17	11.141	21.428		44043	9	17.554	17.158					44184	15	22.702	11.459
43915	11	12.157	21.878		44044	8	12.304	18.504					44185	21	0.966	12.712
43916*	44	15.740	21.340		44045	10	16.570	18.040					44186	10	2.146	12.952
43917	13	21.251	21.186		44046	19	17.490	18.226					44187	14	8.349	12.495
43918	9	11.808	22.856		44047	10	0.094	19.642					44188	18	8.970	12.230
43919	19	16.617	22.043		44048	11	8.806	19.588					44189	14	9.565	12.174
43920*	19	17.758	22.607		44049*	34	14.834	19.006					44190	21	12.692	12.251
43921	37	3.908	23.993		44050	8	5.782	20.652					44191	17	16.241	12.882
43922	10	16.214	23.768		44051	11	9.984	20.636					44192	20	17.918	12.247
43923	25	18.620	23.277		44052*	43	21.810	20.864					44193	13	18.532	12.931
43924	11	23.586	23.971		44053	10	4.122	21.573					44194	14	7.824	13.334
43925	12	2.683	24.498		44054	33	15.330	21.256					44195	24	20.217	13.718
43926	11	8.043	24.703		44055	34	4.922	22.070					44196	28	1.896	14.440
43927	20	8.180	24.968		44056	15	6.620	22.563					44197	13	7.054	14.372
43928	19	10.957	24.986		44057*	48	7.216	22.404					44198	16	22.748	14.683
43929	10	12.314	24.378		44058*	61	10.360	22.736					44199*	23	10.170	15.813
43930	14	15.300	24.348		44059	29	14.058	22.606					44200	20	18.064	15.235
43931	16	17.725	24.296		44060*	50	18.824	22.068					44201	23	14.014	16.298
43932	10	18.883	24.900		44061*	65	18.894	22.204					44202	13	14.740	16.734
43933	8	4.768	25.840		44062	60	20.021	22.930					44203	19	13.922	17.687
43934	9	4.843	25.032		44063	44	20.035	22.888					44204	14	15.729	18.873
43935	10	4.850	25.846		44064	10	3.900	23.280					44205	11	16.310	18.424
43936	20	9.456	25.476		44065	36	5.000	23.179					44206*	51	11.402	19.916
43937	15	11.144	25.491		44066	8	1.334	24.520					44207	15	17.500	20.314
43938	11	14.939	25.923		44067	12	1.500	24.280					44208	12	20.624	20.366
43939	37	15.903	25.880		44068	10	1.687	24.412					44209	13	9.102	21.400
43940	19	20.758	25.528		44069*	40	4.000	24.252					44210	21	14.920	21.576
43941	25	22.372	25.512		44070	8	5.342	24.723					44211	12	25.054	21.742
43942	16	24.122	25.050		44071*	36	6.201	24.308					44212*	117	7.710	22.246
					44072	8	8.466	24.185					44213	12	9.504	22.157
					44073	12	11.001	24.238					44214	14	7.442	23.655
					44074*	63	16.231	24.085					44215	13	13.622	23.756
					44075	25	24.114	24.505					44216	26	1.934	24.739
					44076	28	0.295	25.826					44217	19	14.104	24.307



44218	12	18.334	24.988	44296	21	24.123	10.580	<div>R.A. 16<sup>h</sup> 36<sup>m</sup></div> <div>Plate 1025; 1917 Mar. 26.</div> <div>Provisional Constants.</div> <div>A            B            C</div> <div>-02570 +00125 +0953</div> <div>D            E            F</div> <div>-00093 -02587 -3442</div> <div>Mag.=15.9-1.09√d</div>	44456	12	20.424	9.990	44528	11	19.472	21.936
44219	18	1.568	25.986	44297	18	0.707	11.384		44457	19	2.161	10.350	44529	13	23.309	21.661
44220	39	11.236	25.499	44298	16	22.618	11.589		44458	11	7.300	10.411	44530	10	23.465	21.310
				44299	26	23.471	11.631		44459	13	10.664	10.104	44531	25	24.881	21.372
				44300	27	24.736	12.835		44460	12	11.206	10.410	44532	24	25.976	21.755
				44301*	67	20.071	13.420		44461	13	18.597	10.499	44533	14	0.380	22.392
				44302	18	0.780	14.610		44462	17	19.172	10.582	44534	10	7.146	22.896
				44303	33	17.309	14.016		44463	9	19.304	10.761	44535*	41	13.848	22.503
				44304	40	21.319	14.480		44464	9	19.568	10.248	44536	11	18.902	22.768
				44305	10	6.517	15.714		44465	20	21.034	10.663	44537	29	19.560	22.648
<div>R.A. 16<sup>h</sup> 28<sup>m</sup></div> <div>Plate 1208; 1918 Mar. 11.</div> <div>Provisional Constants.</div> <div>A            B            C</div> <div>-02598 +00461 -1228</div> <div>D            E            F</div> <div>-00472 -02598 +0031</div> <div>Mag.=18.0-1.09√d</div>								44466	25	21.565	10.042	44538	23	1.898	23.736	
				44306	15	19.336	15.392	44467	13	0.661	11.367	44539	20	8.074	23.952	
				44307	13	20.274	15.049	44468	23	1.517	11.408	44540	14	13.272	23.822	
				44308	17	15.761	16.678	44469	23	4.599	11.688	44541	23	13.861	23.533	
				44309	42	21.483	16.737	44470	27	9.772	11.790	44542*	45	13.902	23.966	
				44310	54	25.380	16.378	44471	10	10.149	11.698	44543	14	14.104	23.612	
				44311	29	25.858	16.152	44472	14	20.587	11.552	44544*	42	14.232	23.698	
				44312*	46	9.356	17.050	44473*	46	22.893	11.785	44545	9	16.104	23.320	
				44313	17	14.732	17.889	44474	25	2.792	12.600	44546	12	16.912	23.644	
				44314	14	17.870	17.107	44475	15	10.626	12.630	44547	20	1.198	24.754	
				44315*	63	20.350	17.240	44476	26	21.594	12.180	44548	12	3.943	24.942	
				44316	14	21.002	17.962	44477	10	2.778	13.994	44549	16	4.544	24.894	
				44317	28	21.817	17.234	44478	25	17.323	13.132	44550	25	4.808	24.922	
				44318	16	24.820	17.726	44479	10	22.530	13.494	44551	10	13.698	24.373	
				44319	16	9.253	18.210	44480	15	23.167	13.332	44552*	32	17.387	24.456	
				44320	47	10.034	18.860	44481	19	24.160	13.392	44553	19	5.619	25.783	
				44321	21	10.680	18.270	44482	11	7.612	14.400	44554	17	8.968	25.072	
				44322	10	14.208	18.208	44483	9	24.520	14.850	44555	23	9.857	25.644	
				44323	24	14.793	18.093	44484	8	3.375	15.217	44556	13	16.038	25.784	
				44324	51	15.746	18.010	44485	28	3.940	15.905	44557	22	19.181	25.080	
				44325	20	18.820	18.902	44486	15	5.256	15.358	44558	22	20.672	25.113	
				44326	13	23.110	18.199	44487	17	5.370	15.732	44559	14	25.116	25.120	
				44327	14	25.184	18.575	44488	13	5.864	15.902					
				44328	34	25.859	18.830	44489*	29	9.142	15.384					
				44329	20	20.131	19.112	44490	26	12.608	15.216					
				44330	14	21.112	19.916	44491	15	17.330	15.557					
				44331	22	21.443	19.228	44492	18	20.102	15.717					
				44332	15	22.684	19.666	44493	22	22.694	15.269					
				44333	21	7.482	20.410	44494	32	3.462	16.136					
				44334	14	19.610	20.390	44495	12	5.438	16.476					
				44335	18	20.192	20.692	44496	11	9.220	16.960					
				44336	17	22.302	20.100	44497	12	25.140	16.027					
				44337	21	5.590	21.795	44498	10	2.814	17.248					
				44338	14	9.772	21.408	44499	18	2.914	17.491					
				44339*	56	15.190	21.166	44500	21	22.944	17.048					
				44340	10	20.714	21.759	44501	14	3.287	18.334					
				44341	25	21.313	21.662	44502	28	3.962	18.585					
				44342	13	22.136	21.356	44503	8	18.114	18.559					
				44343*	60	9.060	22.688	44504	22	19.393	18.166					
				44344	19	17.646	22.034	44505	14	21.032	18.182					
				44345	47	18.080	22.476	44506	10	0.418	19.882					
				44346	14	22.244	22.610	44507	12	5.621	19.466					
				44347	10	7.444	23.765	44508	11	18.298	19.018					
				44348	12	14.036	23.347	44509	15	22.024	19.750					
				44349*	53	15.652	23.388	44510	31	24.158	19.072					
				44350	12	17.683	23.328	44511	14	25.477	19.600					
				44351*	62	20.096	23.650	44512	12	25.500	19.360					
				44352	19	21.364	23.218	44513	10	25.625	19.897					
				44353	13	21.650	23.316	44514*	32	8.982	20.054					
				44354	25	23.751	23.964	44515	15	12.612	20.492					
				44355	56	11.320	24.700	44516*	93	12.834	20.898					
				44356	53	16.204	24.100	44517	11	14.604	20.624					
				44357*	63	17.429	24.868	44518	31	15.418	20.847					
				44358	41	19.114	24.948	44519	12	16.118	20.128					
				44359	26	23.043	24.978	44520	15	19.626	20.226					
				44360	29	3.178	25.920	44521*	33	19.780	20.094					
				44361	66	10.028	25.663	44522*	26	21.386	20.158					
				44362	14	11.500	25.927	44523	10	23.835	20.197					
				44363	60	16.266	25.567	44524	25	25.759	20.652					
				44364	54	20.310	25.302	44525	10	8.612	21.763					
				44365	14	25.785	25.186	44526	11	11.130	21.343					
								44527	29	18.476	21.628					

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44617	16	5.900	3.683	44689	9	15.333	14.368	44761	12	10.082	21.492	44811*	37	11.990	1.282	44883	11	18.090	10.562
44618	14	17.988	3.941	44690	16	18.052	14.654	44762	16	15.542	21.526	44812	12	14.105	1.206	44884	12	21.328	10.522
44619	18	19.138	3.283	44691	8	19.692	14.298	44763	8	15.760	21.820	44813*	56	19.142	1.664	44885	14	21.350	10.923
44620	29	20.134	3.722	44692	30	20.092	14.862	44764	11	16.418	21.823	44814	11	19.296	1.896	44886	12	22.092	10.822
44621	12	0.276	4.048	44693	8	23.118	14.878	44765	10	16.796	21.254	44815	10	19.634	1.510	44887*	34	22.355	10.124
44622	13	0.453	4.130	44694*	46	23.858	14.532	44766	16	19.120	21.844	44816	28	7.364	2.058	44888	23	25.454	10.850
44623*	41	0.528	4.815	44695	16	25.206	14.318	44767	9	2.114	22.586	44817	11	15.108	2.098	44889	10	3.408	11.483
44624	27	4.081	4.849	44696	14	25.334	14.156	44768	22	3.900	22.314	44818*	80	17.746	2.022	44890	10	6.249	11.508
44625	10	11.398	4.097	44697	16	25.737	14.442	44769	32	4.284	22.660	44819	28	19.707	2.795	44891	10	22.652	11.233
44626	9	17.384	4.116	44698	13	0.508	15.880	44770	8	10.456	22.661	44820	10	22.632	2.528	44892	14	24.412	11.455
44627	13	21.164	4.810	44699*	31	7.828	15.150	44771	10	10.886	22.404	44821	15	5.158	3.222	44893	13	25.748	11.349
44628	21	2.152	5.346	44700	11	8.692	15.764	44772	12	11.776	22.887	44822	13	8.956	3.364	44894	9	1.934	12.256
44629	19	6.368	5.204	44701	16	10.868	15.643	44773	20	15.366	22.070	44823	22	10.617	3.858	44895	12	2.105	12.610
44630	8	7.710	5.730	44702	9	16.234	15.360	44774	14	20.792	22.483	44824	11	13.256	3.398	44896	15	4.231	12.245
44631	28	24.769	5.998	44703	10	17.846	15.122	44775	10	21.380	22.150	44825	23	13.979	3.124	44897	12	4.587	12.810
44632	11	1.850	6.707	44704	27	18.669	15.866	44776*	50	4.648	23.661	44826*	29	14.420	3.441	44898	10	12.404	12.637
44633	19	19.517	6.478	44705*	54	19.554	15.002	44777	10	9.140	23.583	44827	25	4.245	4.367	44899*	38	19.299	12.835
44634	28	20.820	6.436	44706	8	22.026	15.052	44778*	38	9.702	23.257	44828	11	12.048	4.390	44900	18	21.850	12.694
44635	10	24.558	6.652	44707	11	22.922	15.470	44779	8	11.551	23.586	44829	10	15.512	4.799	44901	17	22.113	12.100
44636	24	1.356	7.180	44708*	40	23.333	15.628	44780	21	15.236	23.908	44830	21	17.043	4.862	44902	8	22.350	12.806
44637	20	17.652	7.912	44709	14	23.438	15.080	44781	8	20.480	23.736	44831	10	0.837	5.348	44903	10	23.344	12.965
44638	12	23.972	7.368	44710	9	24.113	15.169	44782	37	6.661	24.152	44832	24	2.398	5.992	44904	20	24.100	12.148
44639*	41	24.218	7.870	44711*	38	24.978	15.168	44783	9	9.100	24.202	44833	10	7.135	5.042	44905	29	0.820	13.026
44640	41	24.436	7.238	44712	10	2.965	16.598	44784	29	11.914	24.834	44834	12	8.712	5.450	44906	12	1.530	13.984
44641*	40	3.840	8.305	44713	16	9.648	16.737	44785	19	14.672	24.474	44835	12	14.854	5.753	44907	14	2.900	13.040
44642	9	16.934	8.630	44714	21	12.343	16.012	44786*	41	21.095	24.688	44836	16	20.225	5.895	44908	17	5.258	13.781
44643	11	20.014	8.882	44715	11	14.168	16.706	44787	9	21.967	24.832	44837	15	25.216	5.016	44909	18	13.529	13.804
44644	12	22.550	8.310	44716	10	14.800	16.863	44788	8	0.251	25.092	44838	10	1.922	6.918	44910*	42	13.534	13.519
44645	22	23.058	8.892	44717	30	15.925	16.506	44789	11	3.096	25.694	44839	11	5.630	6.025	44911	9	22.659	13.334
44646	18	23.388	8.088	44718	28	22.052	16.571	44790	30	5.270	25.191	44840	11	7.842	6.444	44912	13	23.610	13.846
44647*	46	11.718	9.938	44719	29	22.198	16.814	44791	11	9.791	25.543	44841	14	9.024	6.416	44913*	33	24.129	13.332
44648	14	14.627	9.464	44720	9	24.779	16.821	44792	16	10.816	25.488	44842	13	11.148	6.226	44914	23	24.300	13.672
44649	11	18.050	9.402	44721	11	0.788	17.656	44793	16	10.913	25.720	44843	12	14.440	6.326	44915	11	25.947	13.151
44650	23	18.544	9.874	44722	11	8.073	17.849	44794	9	12.950	25.850	44844	12	15.703	6.528	44916*	49	1.616	14.540
44651	30	22.894	9.704	44723	21	8.254	17.511	44795	18	14.308	25.148	44845	15	16.075	6.270	44917	13	2.962	14.301
44652*	48	24.012	9.769	44724*	36	10.358	17.876	44796	17	18.592	25.277	44846	12	18.698	6.780	44918	11	3.090	14.142
44653	9	25.551	9.656	44725*	39	10.383	17.870	44797	14	18.660	25.172	44847	32	18.933	6.824	44919	13	3.499	14.423
44654	13	10.620	10.589	44726	24	17.228	17.850	44798	10	24.171	25.032	44848	14	1.623	7.374	44920	22	6.585	14.989
44655	14	19.104	10.950	44727	14	19.058	17.500					44849*	36	1.876	7.872	44921	14	12.758	14.560
44656	12	20.798	10.407	44728	17	19.220	17.398					44850	37	2.084	7.239	44922	18	20.406	14.598
44657	10	21.308	10.150	44729	10	21.723	17.103					44851	14	10.386	7.736	44923	13	24.187	14.046
44658	9	22.123	10.154	44730	22	14.854	18.336					44852	11	10.900	7.402	44924	10	24.780	14.938
44659	10	22.610	10.964	44731	14	18.662	18.702					44853	16	16.248	7.356	44925	20	24.828	14.182
44660	27	23.844	10.644	44732	16	21.117	18.068					44854*	42	18.995	7.200	44926	8	25.304	14.878
44661	9	24.106	10.516	44733	29	21.128	18.402					44855	10	19.676	7.630	44927	10	0.696	15.488
44662	10	14.150	11.560	44734	10	22.140	18.754					44856	15	20.233	7.762	44928*	37	1.108	15.640
44663*	34	15.315	11.408	44735	10	25.108	18.812					44857	10	25.080	7.986	44929	10	1.206	15.092
44664	14	17.349	11.635	44736	23	2.034	19.660					44858	13	0.216	8.335	44930*	29	2.744	15.158
44665	15	21.344	11.058	44737	20	6.961	19.960					44859	17	0.732	8.912	44931	12	5.470	15.044
44666	11	25.692	11.503	44738	10	9.074	19.565					44860	16	1.051	8.102	44932	13	5.715	15.873
44667*	53	0.645	12.394	44739	9	9.730	19.188					44861	28	4.758	8.190	44933*	40	14.634	15.582
44668	8	6.556	12.006	44740	28	16.386	19.800					44862	10	7.052	8.640	44934*	27	16.418	15.871
44669	10	7.823	12.714	44741	10	17.552	19.984					44863	14	8.732	8.166	44935	10	17.462	15.660
44670	12	16.075	12.728	44742	14	19.008	19.926					44864	15	12.178	8.870	44936	15	24.500	15.424
44671*	47	16.305	12.998	44743*	32	20.164	19.096					44865	11	12.730	8.997	44937	14	25.860	15.395
44672*	31	19.196	12.732	44744	21	20.190	19.924					44866	14	15.815	8.084	44938	10	4.896	16.948
44673	12	19.713	12.477	44745	9	22.653	19.704					44867*	40	16.812	8.174	44939*	42	5.483	16.020
44674	17	24.376	12.612	44746	8	2.820	20.347					44868	19	22.307	8.106	44940*	49	5.726	16.955
44675	9	1.944	13.982	44747	9	3.360	20.163					44869	12	22.820	8.692	44941	12	7.680	16.320
44676	8	5.334	13.847	44748	9	3.518	20.463					44870	23	0.580	9.726	44942	14	8.384	16.760
44677	10	6.577	13.212	44749	14	12.349	20.948					44871*	51	1.696	9.774	44943	15	14.148	16.158
44678*	42	11.015	13.800	44750	12	13.604	20.570					44872*	66	4.898	9.504	44944	14	14.275	16.456
44679	15	16.792	13.642	44751*	54	15.596	20.608					44873	13	9.080	9.435	44945	11	16.253	16.208
44680	30	23.083	13.008	44752	12	15.741	20.850					44874	25	18.586	9.892	44946	27	16.434	16.574
44681	12	23.780	13.978	44753	8	17.549	20.790					44875	17	22.336	9.614	44947	12	18.157	16.745
44682	15	25.164	13.052	44754	12	18.424	20.687		</										



44955	23	10.746	17.650	<div>R.A. 17<sup>h</sup> 0<sup>m</sup></div> <div>Plate 1050; 1917 May 19.</div> <div>Provisional Constants.</div> <div><div><div>A</div><div>B</div><div>C</div></div><div><div>—02579</div><div>—00155</div><div>—0332</div></div><div><div>D</div><div>E</div><div>F</div></div><div><div>+00159</div><div>—02570</div><div>—0744</div></div><div>Mag.=16.0—1.09√d</div></div> <td>45106</td> <td>11</td> <td>11.879</td> <td>5.344</td> <td>45178</td> <td>12</td> <td>23.370</td> <td>10.792</td> <td>45250</td> <td>11</td> <td>6.975</td> <td>16.640</td>	45106	11	11.879	5.344	45178	12	23.370	10.792	45250	11	6.975	16.640
44956	12	14.958	17.010		45107	15	13.759	5.637	45179	28	24.249	10.056	45251	10	7.078	16.572
44957	24	15.377	17.980		45108	9	15.848	5.917	45180*	33	24.952	10.330	45252	10	7.750	16.653
44958	18	19.366	17.627		45109*	43	16.249	5.645	45181	8	0.625	11.269	45253	12	8.334	16.336
44959	10	19.487	17.447		45110	23	17.696	5.996	45182	14	2.385	11.494	45254	10	9.869	16.654
44960	11	19.487	17.839		45111*	37	17.887	5.921	45183	13	3.722	11.390	45255	32	10.065	16.392
44961	14	21.732	17.325		45112	17	18.699	5.036	45184	9	3.864	11.249	45256	30	12.343	16.133
44962	23	23.210	17.622		45113	28	21.504	5.452	45185	16	4.825	11.559	45257	13	14.292	16.368
44963	10	25.930	17.114		45114	34	22.486	5.116	45186	12	4.826	11.565	45258*	27	15.416	16.984
44964	10	2.932	18.800		45115	24	23.804	5.676	45187	14	5.194	11.464	45259	23	15.490	16.622
44965	20	5.554	18.278	45116*	38	8.478	6.954	45188	12	5.252	11.432	45260*	40	16.013	16.944	
44966	12	8.122	18.168	45117	12	9.356	6.217	45189	27	12.186	11.844	45261	8	17.174	16.972	
44967	21	13.695	18.766	45118	20	9.644	6.513	45190	11	14.464	11.656	45262	9	21.524	16.254	
44968	10	16.638	18.960	45119	13	11.096	6.992	45191*	37	16.026	11.990	45263	9	22.060	16.530	
44969	13	16.774	18.196	45120	28	13.384	6.800	45192	21	16.997	11.029	45264*	72	24.664	16.296	
44970	19	18.456	18.940	45121	36	13.894	6.724	45193	14	21.500	11.138	45265	28	1.185	17.662	
44971	11	18.879	18.378	45122	24	14.662	6.292	45194	12	22.853	11.996	45266	12	3.904	17.152	
44972	10	21.154	18.855	45123	8	18.508	6.394	45195	23	23.100	11.360	45267	15	4.816	17.414	
44973	10	0.488	19.728	45124	17	20.922	6.666	45196	22	0.086	12.138	45268	10	5.600	17.420	
44974	24	6.714	19.286	45125	32	21.504	6.656	45197	25	2.074	12.185	45269	16	7.212	17.864	
44975	11	7.313	19.916	45126	24	22.006	6.506	45198	13	10.535	12.472	45270	18	7.427	17.122	
44976	11	13.391	19.756	45127	9	1.080	7.720	45199	15	13.765	12.496	45271	16	10.390	17.938	
44977	12	16.638	19.526	45128	28	4.526	7.140	45200	11	16.404	12.950	45272	9	12.144	17.464	
44978	10	17.238	19.760	45129	10	6.215	7.474	45201	14	17.708	12.340	45273	18	19.528	17.734	
44979	11	23.277	19.756	45130	24	8.781	7.644	45202	15	18.148	12.620	45274	15	22.300	17.712	
44980	25	23.453	19.244	45131	34	11.262	7.305	45203*	34	21.772	12.148	45275	30	22.829	17.905	
44981	10	2.520	20.500	45132	20	16.370	7.872	45204	10	21.829	12.658	45276	38	25.098	17.178	
44982	11	10.737	20.765	45133	12	19.974	7.770	45205	11	22.546	12.394	45277	9	25.590	17.044	
44983*	34	12.606	20.105	45134	9	20.180	7.983	45206	14	1.584	13.885	45278	13	6.754	18.631	
44984	22	22.556	20.136	45135	13	20.936	7.263	45207*	36	2.104	13.370	45279	28	8.914	18.814	
44985	14	24.454	20.174	45136	10	21.378	7.285	45208	31	2.276	13.710	45280	10	14.632	18.319	
44986	18	4.775	21.716	45137*	40	23.170	7.390	45209	9	3.920	13.190	45281	13	16.125	18.422	
44987*	24	11.438	21.214	45138	15	24.490	7.138	45210	14	7.324	13.500	45282	29	16.224	18.204	
44988	10	11.768	21.610	45139	19	0.280	8.146	45211	11	7.602	13.500	45283	10	16.396	18.566	
44989	11	16.702	21.601	45140	10	0.795	8.732	45212	31	7.728	13.728	45284	25	18.206	18.388	
44990	10	16.708	21.267	45141	12	3.054	8.025	45213	14	9.170	13.191	45285	15	20.150	18.300	
44991	11	18.073	21.834	45142	17	4.550	8.297	45214	24	10.200	13.194	45286	17	21.606	18.114	
44992	14	18.944	21.255	45143	36	5.714	8.328	45215	9	14.025	13.139	45287	11	21.802	18.880	
44993	18	20.862	21.039	45144	15	5.782	8.426	45216	8	14.855	13.736	45288	8	22.347	18.766	
44994	17	9.370	22.665	45145	10	6.599	8.176	45217	36	16.818	13.874	45289	25	23.380	18.746	
44995	14	13.189	22.693	45146	22	11.686	8.374	45218*	41	17.791	13.478	45290	9	1.252	19.796	
44996	10	14.038	22.931	45147	9	18.406	8.881	45219	20	18.096	13.472	45291	28	1.426	19.282	
44997*	29	16.723	22.436	45148	17	18.532	8.135	45220	10	19.982	13.672	45292	19	4.360	19.369	
44998	13	18.194	22.808	45149	14	19.274	8.538	45221	28	21.588	13.860	45293	15	6.605	19.292	
44999	11	21.290	22.844	45150	12	19.315	8.564	45222	12	22.162	13.975	45294	33	8.477	19.570	
45000*	32	6.490	23.753	45151	11	24.330	8.784	45223	19	22.640	13.930	45295	11	8.828	19.130	
45001	10	10.726	23.975	45152	19	0.309	9.652	45224	15	2.162	14.085	45296	15	10.853	19.484	
45002	10	14.127	23.346	45153*	64	1.552	9.576	45225	11	2.756	14.978	45297	35	14.386	19.454	
45003	9	20.322	23.845	45154	12	3.434	9.530	45226	20	2.802	14.218	45298	17	14.515	19.266	
45004	13	4.931	24.536	45155	10	4.441	9.108	45227	9	14.946	14.551	45299	11	16.402	19.288	
45005	14	13.362	24.586	45156	24	8.163	9.701	45228	8	15.195	14.546	45300	11	18.122	19.490	
45006*	26	15.038	24.125	45157	13	18.871	9.226	45229	11	15.484	14.202	45301	18	19.305	19.325	
45007	17	16.820	24.024	45158	33	19.033	9.351	45230	34	16.909	14.136	45302	14	19.927	19.216	
45008	10	18.663	24.446	45159	11	19.114	9.619	45231*	48	16.964	14.428	45303	10	20.260	19.558	
45009	20	21.942	24.700	45160	15	19.356	9.050	45232	14	17.500	14.209	45304*	40	20.870	19.040	
45010	12	2.089	25.035	45161	19	20.886	9.534	45233	8	18.785	14.182	45305*	45	21.576	19.100	
45011	13	16.807	25.048	45162	8	21.903	9.270	45234	11	19.226	14.179	45306	9	23.964	19.672	
				45163	33	25.216	9.056	45235	14	20.954	14.110	45307	30	0.527	20.176	
				45164	13	0.065	10.860	45236	8	21.740	14.818	45308	10	2.163	20.158	
				45165*	37	0.325	10.164	45237	12	2.476	15					



45322	15	19.166	20.436	R.A. 17 <sup>h</sup> 8 <sup>m</sup> Plate 1059; 1917 May 21. Provisional Constants. A B C -02580 +00380 -0729 D E F -00408 -02595 -0899 Mag.=15.6 -1.09√d	45456	11	23.028	3.139	45528	20	21.228	8.969	45600	8	11.621	15.196
45323	20	19.198	20.314		45457	14	1.271	4.634	45529	8	23.465	8.234	45601	15	11.980	15.809
45324	10	20.530	20.799		45458	25	1.560	4.136	45530	18	2.111	9.985	45602	8	12.833	15.113
45325	13	21.466	20.281		45459	8	2.145	4.366	45531*	30	5.434	9.638	45603	24	14.206	15.143
45326	14	21.655	20.202		45460	10	4.466	4.346	45532	10	6.560	9.815	45604	19	16.510	15.795
45327	8	3.600	21.267	No. d x y	45461	8	4.942	4.441	45533	10	12.344	9.069	45605	12	18.037	15.906
45328	12	6.864	21.874		45462	22	7.388	4.888	45534	19	15.556	9.668	45606	12	19.205	15.046
45329	30	7.236	21.782		45463	12	9.030	4.844	45535	23	19.237	9.524	45607*	17	19.477	15.946
45330	13	13.862	21.175		45464	9	9.540	4.966	45536	13	19.900	9.200	45608*	54	19.816	15.152
45331	15	15.862	21.396		45465	14	9.642	4.016	45537	8	20.566	9.615	45609	11	21.064	15.742
45332	10	19.607	21.490	No. d x y	45466	11	14.844	4.770	45538	8	21.376	9.856	45610	9	21.466	15.485
45333	23	20.626	21.436		45467	11	15.990	4.546	45539	9	1.242	10.736	45611	18	25.808	15.035
45334	9	20.726	21.224		45468	33	17.170	4.481	45540*	29	2.818	10.248	45612*	89	2.624	16.216
45335	12	22.333	21.212		45469	16	21.782	4.436	45541*	23	8.310	10.032	45613	17	14.986	16.031
45336	35	22.890	21.205		45470	14	23.542	4.176	45542	16	11.469	10.442	45614	10	18.340	16.286
45337	34	24.494	21.066	No. d x y	45471	23	0.264	5.076	45543*	48	12.138	10.880	45615	9	23.134	16.035
45338	16	7.423	22.574		45472	17	1.595	5.614	45544	10	13.335	10.037	45616	16	23.452	16.050
45339	14	10.738	22.804		45473	11	2.631	5.918	45545	10	15.110	10.248	45617	8	24.454	16.323
45340	9	13.320	22.800		45474	14	6.676	5.081	45546	9	19.591	10.362	45618	11	0.285	17.674
45341	8	14.044	22.510		45475	8	6.874	5.836	45547	17	20.620	10.264	45619	24	0.821	17.856
45342*	43	15.461	22.118	No. d x y	45476*	32	8.726	5.826	45548	13	0.747	11.948	45620*	37	3.078	17.090
45343	29	15.474	22.624		45477*	34	9.364	5.929	45549	12	0.986	11.308	45621	25	4.214	17.958
45344	9	15.561	22.978		45478*	31	11.990	5.718	45550	8	2.604	11.413	45622	21	4.262	17.756
45345	12	18.775	22.779		45479	8	12.310	5.803	45551	12	7.952	11.916	45623	14	5.158	17.302
45346	26	19.023	22.616		45480	8	17.222	5.161	45552	12	11.302	11.784	45624	11	7.624	17.296
45347	20	19.250	22.666	No. d x y	45481	11	18.135	5.176	45553	11	12.942	11.242	45625	10	8.116	17.722
45348	12	19.273	22.666		45482	12	18.628	5.395	45554	19	14.182	11.295	45626	10	9.580	17.187
45349	21	21.246	22.338		45483	21	19.614	5.284	45555	9	14.426	11.598	45627*	22	12.046	17.554
45350	24	23.401	22.996		45484*	28	20.082	5.520	45556	22	16.434	11.924	45628	11	15.237	17.400
45351	8	23.504	22.358		45485	11	20.464	5.814	45557*	35	19.105	11.636	45629*	40	15.751	17.512
45352	8	23.862	22.726	No. d x y	45486*	26	5.784	6.340	45558	16	23.751	11.502	45630	8	16.216	17.354
45353*	43	5.862	23.654		45487	9	7.346	6.086	45559	12	24.976	11.483	45631	9	19.498	17.172
45354	32	7.378	23.778		45488	13	10.791	6.128	45560*	20	4.477	12.400	45632	19	1.386	18.688
45355	13	9.274	23.178		45489	8	11.898	6.760	45561	14	14.930	12.994	45633	12	5.102	18.246
45356	14	13.638	23.422		45490	9	13.244	6.248	45562	15	15.294	12.624	45634	8	5.484	18.524
45357	13	16.582	23.869	No. d x y	45491	22	13.636	6.213	45563	10	21.630	12.800	45635	18	6.704	18.614
45358	10	20.259	23.226		45492*	26	14.292	6.032	45564	8	22.154	12.329	45636	8	6.774	18.889
45359	23	22.406	23.172		45493	8	14.458	6.726	45565*	27	22.444	12.590	45637	8	12.428	18.678
45360	8	23.432	23.787		45494	11	15.936	6.879	45566	8	23.258	12.833	45638	15	19.919	18.601
45361*	39	24.954	23.481		45495	9	16.840	6.957	45567	12	23.414	12.894	45639	11	20.100	18.149
45362	9	25.284	23.344	No. d x y	45496	24	20.246	6.250	45568	10	0.086	13.936	45640	10	23.576	18.443
45363*	38	5.464	24.294		45497	20	20.526	6.024	45569	12	0.566	13.885	45641	9	1.985	19.604
45364	9	6.284	24.696		45498	10	20.920	6.130	45570	8	1.602	13.565	45642	16	12.942	19.382
45365	11	9.752	24.393		45499	10	22.650	6.048	45571	8	6.602	13.894	45643	8	16.427	19.052
45366	12	10.392	24.432		45500	18	24.386	6.633	45572	16	7.462	13.834	45644	16	18.991	19.876
45367	11	10.487	24.357	No. d x y	45501*	34	0.985	7.338	45573	8	7.672	13.672	45645	10	21.024	19.013
45368*	43	10.827	24.938		45502	14	2.302	7.066	45574	14	7.983	13.564	45646	13	23.539	19.028
45369	10	12.252	24.618		45503	11	8.349	7.112	45575	13	9.336	13.188	45647	10	23.550	19.015
45370	10	12.756	24.242		45504	8	11.206	7.250	45576	10	10.312	13.034	45648	8	24.812	19.809
45371	8	14.450	24.918		45505	8	11.220	7.520	45577*	25	10.317	13.194	45649	24	2.539	20.988
45372	12	15.014	24.038	No. d x y	45506	10	11.926	7.844	45578	15	10.696	13.994	45650	12	6.268	20.690
45373	9	16.290	24.178		45507	10	11.997	7.863	45579	10	16.778	13.905	45651	12	6.524	20.203
45374	19	18.695	24.008		45508	15	12.741	7.467	45580	20	16.816	13.748	45652	8	7.407	20.324
45375	10	20.175	24.652		45509	8	13.086	7.936	45581	10	17.231	13.040	45653*	24	8.712	20.260
45376	19	21.965	24.016		45510	9	14.204	7.146	45582	12	17.524	13.377	45654	13	11.154	20.850
45377	8	5.053	25.392	No. d x y	45511	9	17.127	7.680	45583	10	18.173	13.703	45655	13	12.109	20.654
45378	11	6.179	25.681		45512	17	18.036	7.422	45584	14	22.056	13.554	45656	12	24.056	20.992
45379	8	6.248	25.986		45513	22	18.936	7.282	45585	25	22.654	13.026	45657	10	24.854	20.246
45380	10	6.394	25.986		45514	16	19.246	7.159	45586	18	25.268	13.846	45658	20	25.218	20.618
45381	11	10.426	25.181		45515	8	19.424	7.710	45587	9	4.206	14.716	45659	11	0.378	21.172
45382	26	10.791	25.566	No. d x y	45516	9	21.478	7.046	45588	8	5.828	14.744	45660	27	0.936	21.154
45383	12	12.072	25.294		45517	8	0.426	8.888	45589	8	6.316	14.372	45661	9	2.510	21.178
45384	18	12.166	25.384		45518	9	2.171	8.712	45590	11	12.556	14.095	45662	10	5.024	21.975
45385	29	13.236	25.768		45519	20	3.060	8.970	45591*	33	13.364	14.258	45663	17	6.374	21.936
45386	14	14.776	25.574		45520*	34	3.856	8.248	45592	22	14.784	14.776	45664*	20	11.471	21.995
45387	10	15.842	25.646	No. d x y	45521	10	6.481	8.098	45593	19	19.074	14.168	45665*	29	15.394	21.267
45388	16	15.856	25.626		45522	16	8.907	8.488	45594	8	21.454	14.680	45666	11	15.840	21.163
45389	29	16.900	25.528		45523	9	10.054	8.132	45595	18	23.554	14.222	45667	11	15.864	21.140
45390	56	19.810	25.357		45524*	25	11.344	8.124	45596	8	24.476	14.587	45668	15	16.294	21.904
45391	14	20.987	25.375		45525	16	17.608	8.590	45597	9	1.636	15.582	45669	12	19.488	21.274
					45526	10	18.274	8.228	45598	8	3.946	15.384	45670	11	20.268	21.764
					45527	8	18.834	8.336	45599	8	4.993	15.314	45671	8	21.168	21.896



45672	10	22.080	21.254	<div>R.A. 17<sup>h</sup> 16<sup>m</sup></div> <div>Plate 1057; 1917 May 20.</div> <div>Provisional Constants.</div> <div>A            B            C</div> <div>—0.2570 +0.0327 —1.963</div> <div>D            E            F</div> <div>—0.00337 —0.2573 —0.0044</div> <div>Mag. = 16.3 — 1.09√d</div>	45806	24	22.817	3.104	45878	23	20.668	10.926	45950	17	1.392	18.616
45673	9	22.894	21.828		45807	22	1.202	4.354	45879	21	1.490	11.674	45951	23	9.400	18.778
45674	11	22.918	21.950		45808	16	5.362	4.214	45880	19	2.716	11.642	45952	11	10.455	18.534
45675	17	24.916	21.234		45809	22	10.456	4.877	45881*	36	7.376	11.556	45953	13	11.294	18.170
45676	10	0.806	22.125		45810	19	11.434	4.039	45882	15	7.472	11.165	45954	19	14.348	18.588
45677	20	1.479	22.934		45811	21	12.595	4.132	45883	17	9.808	11.403	45955*	59	14.400	18.654
45678	10	1.573	22.296		45812	20	13.456	4.314	45884	16	10.246	11.642	45956	16	15.594	18.208
45679	9	1.715	22.842		45813	20	15.901	4.986	45885	12	16.222	11.318	45957	11	19.868	18.874
45680	23	4.470	22.392		45814	30	16.797	4.892	45886	15	18.620	11.490	45958	19	1.360	19.204
45681	14	8.568	22.135		45815	17	20.018	4.128	45887	19	20.119	11.318	45959	17	1.373	19.191
45682	8	8.844	22.774	45816	37	20.252	4.006	45888*	36	0.194	12.778	45960	12	3.660	19.583	
45683	10	22.924	22.986	45817	19	22.744	4.178	45889	14	6.642	12.730	45961	21	5.416	19.932	
45684	12	23.534	22.424	45818	10	2.104	5.312	45890*	36	7.062	12.506	45962*	38	6.910	19.366	
45685	24	24.124	22.442	45819	16	3.300	5.924	45891*	49	14.246	12.684	45963	20	6.960	19.116	
45686	37	25.373	22.678	45820	14	7.836	5.254	45892	13	17.926	12.569	45964*	62	7.127	19.672	
45687	14	0.060	23.981	45821	13	9.516	5.890	45893	22	22.190	12.596	45965	30	11.750	19.364	
45688	14	0.488	23.128	45822	23	10.026	5.007	45894	25	22.670	12.298	45966	12	11.955	19.984	
45689	8	1.524	23.728	45823	15	12.083	5.168	45895	26	0.412	13.212	45967	20	12.424	19.586	
45690*	32	3.038	23.398	45824	21	12.457	5.332	45896	18	1.172	13.072	45968	11	17.824	19.926	
45691	12	7.446	23.985	45825	15	15.712	5.439	45897	11	1.399	13.044	45969	17	24.096	19.966	
45692	8	8.808	23.266	45826	13	16.224	5.348	45898	12	1.476	13.630	45970	12	1.580	20.660	
45693	10	11.322	23.242	45827	24	18.414	5.086	45899	21	5.918	13.295	45971	15	2.687	20.405	
45694	13	12.792	23.670	45828	18	19.869	5.048	45900	20	19.712	13.866	45972	19	2.794	20.172	
45695	8	12.904	23.708	45829*	98	20.168	5.046	45901	13	21.364	13.012	45973	26	3.056	20.774	
45696	14	17.336	23.479	45830	20	21.027	5.921	45902	18	22.006	13.285	45974	18	3.300	20.956	
45697	15	17.394	23.464	45831	22	24.106	5.976	45903	18	22.530	13.528	45975	17	5.350	20.946	
45698	9	19.238	23.217	45832	14	0.336	6.233	45904	21	25.072	13.080	45976	14	6.331	20.226	
45699	14	19.574	23.086	45833	24	2.074	6.801	45905	22	1.322	14.397	45977	32	7.309	20.904	
45700	14	20.727	23.065	45834	11	4.920	6.394	45906	19	3.034	14.004	45978	16	8.867	20.343	
45701	14	24.010	23.446	45835	20	4.922	6.620	45907*	39	4.105	14.371	45979	19	8.986	20.698	
45702	29	4.372	24.546	45836	14	5.034	6.497	45908	19	5.034	14.295	45980	18	9.413	20.855	
45703	10	4.461	24.302	45837	36	7.486	6.623	45909	13	6.638	14.280	45981	14	18.858	20.776	
45704	13	4.531	24.766	45838	18	8.370	6.403	45910	15	6.708	14.054	45982	14	20.218	20.626	
45705	18	11.604	24.796	45839	22	9.102	6.146	45911	13	20.188	14.214	45983*	56	22.408	20.226	
45706	8	13.768	24.669	45840	14	9.577	6.508	45912	24	20.870	14.214	45984	22	2.762	21.394	
45707	9	18.257	24.450	45841	14	15.284	6.713	45913	40	23.336	14.517	45985	18	3.921	21.223	
45708	10	20.037	24.319	45842	12	16.541	6.165	45914	23	25.844	14.380	45986	15	5.290	21.446	
45709	25	23.086	24.140	45843	14	16.629	6.232	45915	20	3.585	15.184	45987	15	7.427	21.192	
45710	10	23.253	24.914	45844	19	23.584	6.896	45916	18	4.185	15.828	45988	22	8.372	21.546	
45711	23	23.706	24.988	45845	30	8.294	7.945	45917	26	6.236	15.844	45989	12	10.705	21.275	
45712	18	25.944	24.821	45846	14	8.400	7.520	45918*	96	8.928	15.312	45990	12	13.939	21.034	
45713	9	0.130	25.916	45847*	37	11.816	7.461	45919	12	10.734	15.548	45991	16	15.270	21.972	
45714	10	1.686	25.732	45848	14	13.910	7.277	45920	16	12.786	15.084	45992	23	22.916	21.630	
45715	14	6.031	25.478	45849*	38	13.918	7.304	45921*	44	23.358	15.023	45993	24	23.212	21.528	
45716	13	6.088	25.531	45850	17	16.901	7.266	45922	20	23.643	15.840	45994	11	24.774	21.414	
45717	10	6.326	25.842	45851	13	17.074	7.553	45923	11	25.320	15.702	45995	24	25.020	21.518	
45718	15	14.450	25.146	45852	14	21.614	7.612	45924	20	25.708	15.879	45996	15	1.392	22.599	
45719	8	14.483	25.446	45853	20	21.712	7.158	45925	13	0.924	16.214	45997	32	1.980	22.610	
45720	21	17.111	25.284	45854*	32	21.838	7.924	45926	18	1.238	16.227	45998	39	3.234	22.835	
45721	9	18.901	25.924	45855	23	22.074	7.922	45927	23	5.934	16.968	45999	28	4.350	22.134	
45722	29	19.598	25.208	45856	11	23.547	7.688	45928	32	6.319	16.884	46000	19	5.815	22.806	
45723	10	20.814	25.920	45857	14	8.683	8.394	45929	15	7.216	16.590	46001	18	7.260	22.986	
45724	11	21.334	25.227	45858	32	13.736	8.408	45930	12	8.300	16.682	46002*	56	7.346	22.913	
45725	10	21.780	25.998	45859	24	13.750	8.914	45931	17	9.080	16.095	46003	23	11.531	22.268	
45726	11	23.016	25.276	45860	14	15.390	8.628	45932*	59	16.328	16.748	46004	19	11.948	22.848	
45727	13	23.144	25.234	45861	14	17.646	8.884	45933	17	17.842	16.200	46005	14	13.650	22.824	
				45790	13	0.676	3.319	45934	17	18.302	16.385	46006	22	15.017	22.490	
				45791	21	0.680	3.603	45935	21	25.598	16.037	46007	18	17.664	22.906	
				45792	22	3.976	3.203	45936	19	2.424	17.276	46008	17	19.190	22.514	
				45793	21	4.182	3.151	45937*	31	5.414	17.974	46009	23	20.054	22.678	
				45794												



46022	37	23.464	23.034	46115	9	11.630	1.212	46187	11	15.877	7.606	46259	18	8.536	16.388
46023	38	23.540	23.202	46116	13	12.169	1.594	46188	11	17.532	7.973	46260	10	18.056	16.084
46024	39	25.982	23.164	46117	30	12.178	1.534	46189	28	20.388	7.606	46261	21	19.680	16.293
46025	23	0.965	24.318	46118	30	13.384	1.797	46190	30	21.257	7.744	46262*	39	21.792	16.200
46026	21	3.830	24.972	46119	11	13.401	1.802	46191	12	21.792	7.310	46263	14	24.371	16.156
46027	25	4.248	24.206	46120	8	14.461	1.030	47192	39	24.932	7.210	46264	10	25.876	16.554
46028	20	8.812	24.725	46121	8	15.236	1.399	46193	14	1.774	8.934	46265*	39	2.886	17.744
46029*	36	13.096	24.033	46122	13	15.899	1.877	46194	24	6.843	8.332	46266	24	2.893	17.802
46030	13	14.736	24.588	46123	13	15.913	1.764	46195	25	9.652	8.624	46267	14	4.828	17.940
46031	18	15.322	24.334	46124	22	16.286	1.170	46196	13	12.265	8.068	46268*	11	12.064	17.249
46032	16	18.592	24.742	46125	8	17.378	1.142	46197	10	12.900	8.636	46269	11	15.167	17.726
46033	13	18.690	24.006	46126	17	18.544	1.798	46198	10	15.946	8.466	46270	12	18.235	17.787
46034	32	21.088	24.085	46127	13	20.292	1.453	46199	31	16.294	8.952	46271	20	22.194	17.322
46035*	40	21.493	24.495	46128	11	20.758	1.108	46200	16	21.437	8.008	46272	11	23.448	17.282
46036	18	0.906	25.457	46129	14	23.617	1.562	46201	13	22.912	8.364	46273	26	23.471	17.663
46037	20	1.036	25.414	46130	17	24.560	1.520	46202	8	23.340	8.624	46274	10	24.592	17.500
46038	16	1.144	25.094	46131	27	25.936	1.086	46203	17	14.224	9.232	46275	17	25.426	17.962
46039	32	1.593	25.164	46132	8	1.254	2.933	46204	20	17.227	9.836	46276	10	3.420	18.448
46040	38	5.269	25.886	46133	8	12.558	2.880	46205	20	19.494	9.893	46277	14	4.168	18.243
46041	19	5.611	25.882	46134	25	12.870	2.937	46206	22	19.888	9.828	46278	8	13.094	18.200
46042	20	7.523	25.742	46135	29	13.685	2.900	46207	13	21.635	9.788	46279*	46	14.588	18.252
46043	15	8.911	25.696	46136	14	14.392	2.858	46208	14	23.140	9.050	46280	25	24.181	18.394
46044	19	9.244	25.604	46137	15	15.389	2.291	46209*	39	24.752	9.204	46281	8	25.793	18.706
46045	22	10.151	25.568	46138	9	17.960	2.737	46210	19	10.148	10.712	46282	8	3.744	19.368
46046	14	11.802	25.700	46139	21	20.990	2.947	46211	11	14.260	10.999	46283	8	11.296	19.405
46047	48	11.821	25.971	46140	10	21.752	2.504	46212	13	15.394	10.978	46284	20	14.603	19.392
46048	18	13.172	25.918	46141	9	22.538	2.465	46213	12	20.604	10.856	46285	8	16.816	19.964
46049	16	13.602	25.699	46142	63	25.558	2.705	46214	10	23.439	10.229	46286	17	21.709	19.416
46050	48	14.674	25.826	46143	15	0.566	3.227	46215	11	23.534	10.192	46287*	49	0.376	20.352
46051	49	15.358	25.707	46144	8	3.187	3.373	46216*	36	4.673	11.597	46288	15	2.062	20.072
46052	35	16.294	25.894	46145	29	3.720	3.002	46217	16	5.822	11.254	46289	9	7.236	20.031
46053	22	17.126	25.980	46146*	42	8.961	3.482	46218	12	9.756	11.350	46290	17	13.144	20.747
46054	32	18.398	25.548	46147	8	17.434	3.675	46219	9	13.500	11.044	46291	10	21.621	20.049
46055	21	23.618	25.748	46148	22	19.446	3.038	46220	16	17.581	11.676	46292	9	25.586	20.898
				46149	10	24.226	3.693	46221	24	0.061	12.727	46293	22	0.906	21.751
				46150	9	24.294	3.228	46222	27	0.536	12.423	46294	26	1.198	21.642
				46151	10	0.506	4.303	46223	13	6.496	12.688	46295	16	3.006	21.610
				46152*	44	6.166	4.022	46224	9	6.655	12.802	46296	8	4.048	21.512
				46153	13	7.602	4.098	46225	17	7.410	12.494	46297	10	7.724	21.367
				46154	11	15.267	4.608	46226	10	13.264	12.250	46298	17	10.296	21.485
				46155	32	16.463	4.368	46227	19	19.358	12.440	46299	23	15.900	21.452
				46156	11	19.464	4.668	46228	23	22.986	12.616	46300	12	20.281	21.660
				46157	8	19.663	4.047	46229	10	23.078	12.324	46301	14	20.810	21.156
				46158	9	19.841	4.733	46230	8	23.563	12.641	46302	12	6.153	22.599
				46159	17	20.119	4.080	46231	9	24.340	12.500	46303	11	6.287	22.244
				46160	23	20.226	4.644	46232	12	0.411	13.656	46304	17	9.256	22.862
				46161	30	22.106	4.452	46233	20	2.949	13.174	46305	14	10.402	22.724
				46162*	59	22.468	4.062	46234	10	4.818	13.681	46306	12	21.965	22.788
				46163	15	23.062	4.952	46235*	48	14.718	13.062	46307*	26	23.083	22.539
				46164	20	24.975	4.842	46236	11	16.100	13.120	46308	9	0.178	23.522
				46165	19	4.704	5.773	46237	10	19.472	13.778	46309	29	0.196	23.212
				46166	17	4.773	5.393	46238	8	20.379	13.207	46310	37	1.470	23.146
				46167	9	9.902	5.251	46239*	22	22.786	13.450	46311	38	1.548	23.313
				46168	12	11.498	5.226	46240*	43	24.302	13.858	46312*	37	3.992	23.244
				46169	18	18.181	5.229	46241	19	24.693	13.212	46313	31	7.592	23.073
				46170	10	19.448	5.358	46242	11	25.892	13.258	46314	12	20.260	23.188
				46171	12	23.084	5.908	46243	36	1.232	14.632	46315	38	22.235	23.428
				46172	12	1.891	6.086	46244	20	3.738	14.464	46316	10	9.917	24.900
				46173	22	6.732	6.800	46245	16	6.454	14.828	46317	9	10.662	24.037
				46174	22	12.150	6.445	46246*	32	6.512	14.294	46318	8	16.436	24.676
				46175	12	17.569	6.850	46247	10	19.786	14.586	46319	11	24.006	24.564
				46176	11	19.100	6.397	46248	12	20.602	14.600	46320*	38	24.844	24.726
				46177	9	19.950	6.553	46249	10	23.934	14.179	46321	12	25.668	24.867
				46178	28	22.261	6.030	46250	32	25.184	14.408	46322	9	1.660	25.856
				46179	30	22.347	6.188	46251*	45	1.261	15.138	46323	11	6.404	25.498
				46180	13	23.277	6.408	46252	15	1.556	15.950	46324	16	9.078	25.440
				46181	9	24.864	6.952	46253	13	3.623	15.963	46325	9	10.159	25.662
				46182	12	1.380	7.008	46254	32	6.906	15.032	46326	14	11.737	25.652
				46183	22	4.900	7.476	46255	18	19.648	15.509	46327	32	18.206	25.830
				46184	30	7.712	7.092	46256	9	24.337	15.210	46328	20	18.757	25.822
				46185*	20	10.788	7.788	46257	9	3.282	16.534	46329*	18	23.415	25.288
				46186*	42	11.330	7.782	46258	21	3.512	16.124	46330	12	25.417	25.340

R.A. 17<sup>h</sup> 32<sup>m</sup>

Plate 1051 : 1917 May 19.

Provisional Constants.

A	B	C
-0.02565	+0.00972	-0.1056

D	E	F
-0.00964	-0.02574	+0.0549

Mag. = 16.0 - 1.09√d

No.	d	x	y
46351	40	0.010	0.728
46352	22	0.896	0.896
46353	23	5.198	0.640
46354	8	6.799	0.515
46355	9	8.684	0.880
46356	23	9.370	0.184
46357	17	10.021	0.990
46358	11	10.284	0.679
46359	9	12.425	0.542
46360	10	13.457	0.590
46361	21	14.280	0.764
46362	10	15.475	0.466
46363	10	16.300	0.415
46364	17	20.952	0.286
46365	16	23.956	0.298
46366	19	1.494	1.678
46367	16	2.438	1.620
46368	8	3.188	1.530
46369	27	3.806	1.166
46370	10	5.635	1.637
46371	10	6.746	1.710
46372	10	7.550	1.642
46373	11	8.830	1.606
46374	19	9.340	1.864
46375	16	9.342	1.674
46376	10	10.294	1.553
46377	14	10.346	1.162
46378	13	10.857	1.070
46379	10	10.970	1.758
46380	15	11.300	1.318
46381	16	11.555	1.894
46382	11	12.290	1.639
46383	13	12.310	1.728
46384	10	12.550	1.198
46385	8	12.780	1.472
46386	12	12.860	1.312
46387	10	13.325	1.800
46388	8	14.700	1.436
46389	15	14.923	1.890
46390	9	15.582	1.574
46391	23	16.860	1.090
46392	36	17.535	1.710
46393	14	18.520	1.676
46394	9	19.066	1.215
46395	11	19.258	1.914
46396	13	19.939	1.793
46397	13	20.160	1.516
46398*	42	20.600	1.208
46399*	46	21.724	1.952
46400	12	21.826	1.930
46401	40	23.638	1.751
46402	24	23.889	1.163
46403	10	0.430	2.600
46404*	67	3.448	2.793
46405	12	3.857	2.358



46406	10	3.922	2.966	46478	10	1.030	6.029	46550	9	12.558	10.196	46622	14	6.076	16.282	46694*	36	3.088	24.820
46407	27	4.579	2.972	46479	10	5.910	6.672	46551	14	13.247	10.607	46623	9	6.574	16.773	46695	16	3.920	24.948
46408	12	4.787	2.441	46480	11	6.744	6.467	46552	11	16.430	10.686	46624	11	10.040	16.022	46696	10	5.804	24.250
46409	8	5.815	2.972	46481	37	7.248	6.831	46553	9	16.686	10.154	46625	12	13.025	16.690	46697	10	6.964	24.260
46410	10	5.950	2.702	46482	15	7.908	6.426	46554	17	18.260	10.261	46626	28	13.026	16.432	46698	12	8.792	24.426
46411	10	6.544	2.759	46483	9	10.028	6.310	46555	14	22.214	10.520	46627	19	14.615	16.964	46699*	46	9.187	24.492
46412	12	9.037	2.791	46484	10	12.390	6.335	46556	12	22.665	10.214	46628	10	15.586	16.066	46700	23	11.298	24.734
46413	11	9.984	2.860	46485	10	13.781	6.246	46557	10	23.498	10.014	46629	19	22.981	16.359	46701	14	11.350	24.740
46414	39	10.116	2.343	46486	9	18.282	6.312	46558	9	23.582	10.010	46630	16	24.050	16.346	46702*	39	11.716	24.228
46415	12	10.514	2.264	46487	22	18.747	6.460	46559	11	23.928	10.927	46631	19	25.123	16.688	46703	24	11.880	24.235
46416	16	11.287	2.156	46488	23	18.989	6.749	46560	10	25.676	10.584	46632	40	25.135	16.656	46704	22	21.223	24.273
46417	9	12.765	2.492	46489	10	22.264	6.778	46561	8	1.007	11.658	46633	15	0.323	17.458	46705	63	25.464	24.871
46418	12	13.200	2.047	46490	20	22.310	6.167	46562	11	5.201	11.918	46634	12	1.574	17.398	46706*	21	1.670	25.403
46419	36	15.116	2.301	46491	11	2.832	7.050	46563	60	10.344	11.786	46635	25	1.603	17.779	46707	19	3.670	25.424
46420	9	17.600	2.499	46492	32	2.899	7.306	46564	20	12.980	11.775	46636	10	2.671	17.525	46708	21	11.367	25.221
46421	44	19.278	2.904	46493	13	6.435	7.057	46565	8	13.684	11.646	46637	13	2.724	17.598	46709	11	14.320	25.754
46422	10	19.291	2.527	46494	27	7.354	7.708	46566	10	16.334	11.972	46638	18	9.226	17.260	46710	14	14.617	25.193
46423	19	19.625	2.372	46495	11	9.712	7.207	46567	10	17.683	11.594	46639	20	9.680	17.132	46711	10	17.850	25.127
46424	25	21.292	2.657	46496	10	13.198	7.236	46568	10	19.693	11.031	46640	14	10.257	17.932	46712	11	18.594	25.604
46425	9	21.450	2.866	46497	26	14.028	7.660	46569	10	20.810	11.474	46641	10	22.076	17.660	46713	10	19.592	25.700
46426	11	21.488	2.614	46498	13	14.798	7.307	46570	9	22.587	11.750	46642	47	22.100	17.268	46714	17	20.030	25.542
46427	13	23.610	2.241	46499	12	14.818	7.394	46571	23	1.040	12.740	46643	21	2.322	18.500	46715	12	22.084	25.440
46428	24	23.754	2.110	46500	21	15.248	7.946	46572	10	1.620	12.756	46644	15	3.564	18.050				
46429	10	24.196	2.450	46501	17	17.806	7.176	46573	10	2.394	12.607	46645	30	8.365	18.157				
46430	11	2.140	3.799	46502	16	17.923	7.200	46574	10	6.060	12.517	46646	22	12.287	18.701				
46431	11	2.200	3.336	46503	10	19.443	7.542	46575	12	6.208	12.580	46647	10	14.780	18.764				
46432	43	4.459	3.165	46504	10	19.516	7.126	46576	10	7.762	12.501	46648	53	15.370	18.198				
46433	10	5.538	3.344	46505	10	21.248	7.532	46577	27	14.010	12.766	46649	28	21.604	18.150				
46434	46	5.610	3.074	46506	21	22.060	7.752	46578	14	14.982	12.488	46650	10	10.142	19.822				
46435	14	10.854	3.571	46507	46	22.200	7.726	46579	27	17.070	12.126	46651	8	22.120	19.670				
46436	11	11.208	3.642	46508	11	22.638	7.942	46580	11	20.270	12.330	46652	15	22.613	19.960				
46437	13	12.057	3.373	46509	16	24.650	7.764	46581	8	20.692	12.511	46653	10	3.771	20.980				
46438	16	13.844	3.949	46510	20	24.809	7.422	46582	11	21.083	12.262	46654	12	10.466	20.510				
46439	17	17.631	3.102	46511	12	0.896	8.492	46583	16	21.710	12.122	46655	12	17.850	20.698				
46440	10	18.026	3.567	46512	26	4.450	8.058	46584	11	24.000	12.862	46656	13	20.360	20.192				
46441	10	19.262	3.644	46513	12	4.553	8.684	46585	21	0.851	13.579	46657	10	21.068	20.074				
46442	10	20.543	3.766	46514	26	5.812	8.110	46586	47	2.372	13.960	46658	10	2.150	21.190				
46443	10	22.394	3.571	46515	18	6.575	8.845	46587	18	2.755	13.310	46659	8	6.972	21.524				
46444	10	23.104	3.059	46516	15	10.815	8.694	46588	12	3.952	13.336	46660	23	10.195	21.548				
46445	12	23.409	3.758	46517	13	10.850	8.100	46589	9	5.335	13.393	46661	14	11.302	21.107				
46446	9	24.272	3.731	46518	11	14.569	8.247	46590	12	6.084	13.941	46662	24	14.903	21.792				
46447	11	25.244	3.652	46519	28	16.150	8.634	46591	10	7.198	13.275	46663	16	15.282	21.576				
46448	25	25.394	3.961	46520	8	16.190	8.668	46592	11	8.209	13.206	46664	19	23.100	21.450				
46449	22	0.030	4.592	46521	30	20.621	8.076	46593	11	10.018	13.341	46665	9	23.170	21.992				
46450	63	0.381	4.197	46522	24	21.166	8.660	46594	12	10.846	13.164	46666	16	23.465	21.016				
46451	16	2.905	4.936	46523	14	22.758	8.436	46595	18	16.776	13.770	46667	11	0.180	22.926				
46452	40	4.778	4.040	46524	22	23.162	8.032	46596	10	19.948	13.636	46668	23	1.291	22.661				
46453	25	5.514	4.673	46525	21	23.814	8.830	46597	12	24.018	13.270	46669	15	5.546	22.834				
46454	28	8.316	4.958	46526	13	24.274	8.866	46598	20	25.370	13.900	46670	46	6.272	22.390				
46455	24	10.930	4.570	46527	20	24.925	8.604	46599	10	2.011	14.289	46671	10	6.444	22.513				
46456	10	14.703	4.700	46528	12	25.578	8.270	46600	25	3.265	14.497	46672	10	6.640	22.602				
46457	10	15.009	4.202	46529	16	1.136	9.172	46601	12	8.474	14.575	46673	15	9.158	22.314				
46458	18	10.412	4.586	46530	42	2.748	9.304	46602	14	11.085	14.528	46674	20	9.314	22.587				
46459	23	20.034	4.308	46531	11	2.840	9.236	46603	12	13.358	14.270	46675	11	9.760	22.857				
46460	10	20.276	4.152	46532	27	5.191	9.271	46604	15	13.482	14.083	46676	13	11.476	22.823				
46461	29	20.460	4.593	46533	20	5.692	9.090	46605	15	16.298	14.780	46677	12	12.196	22.762				
46462	19	22.306	4.904	46534	26	8.422	9.860	46606	10	16.300	14.216	46678	16	13.975	22.067				
46463	10	23.590	4.057	46535	9	9.900	9.770	46607	8	16.340	14.012	46679	9	23.552	22.584				
46464	13	0.994	3.076	46536	22	17.168	9.681	46608	10	17.802	14.223	46680	10	25.386	22.864				
46465	12	4.710	5.061	46537	13	17.406	9.770	46609	14	19.914	14.540	46681	41	25.926	22.563				
46466	9	5.415	5.648	46538	20	18.610	9.410	46610	31	23.465	14.966	46682	36	0.460	23.564				
46467	15	7.876	5.634	46539	10	18.691	9.568	46611	11	1.292	15.057	46683	21	9.480	23.832				
46468	10	8.900	5.184	46540	26	18.743	9.774	46612	10	2.430	15.313	46684	15	10.321	23.164				
46469	10	11.458	5.010	46541	20	19.786	9.829	46613	12	6.706	15.398	46685	33	13.390	23.294				
46470	17	12.800	5.210	46542	18	22.278	9.142	46614	14	8.360	15.942	46686	10	15.220	23.771				
46471	12	13.940	5.117	46543	8	23.524	9.844	46615	24	10.262	15.868	46687	9	20.300	23.501				
46472	9	14.371	5.878	46544	13	1.453	10.348	46616	10	11.580	15.668	46688	10	20.530	23.015				
46473	45	16.622	5.018	46545	12	1.550	10.310	46617	10	14.339	15.825	46689	30</						



46777	24	1.425	2.207	46849	56	0.032	7.698	46921	26	9.530	11.170	46993*	39	6.649	19.274	47065	40	0.497	25.990
46778	36	1.567	2.075	46850	19	0.472	7.909	46922	24	12.294	11.409	46994	15	7.564	19.804	47066	19	5.840	25.724
46779	22	2.008	2.410	46851	14	0.848	7.154	46923	21	16.893	11.944	46995	13	8.583	19.316	47067	21	6.180	25.732
46780	21	2.074	2.085	46852	16	2.115	7.858	46924*	40	17.808	11.191	46996	14	10.570	19.916	47068	17	7.256	25.206
46781	39	4.328	2.683	46853	32	2.485	7.726	46925	26	20.554	11.128	46997	15	11.035	19.898	47069	16	9.850	25.269
46782	18	6.230	2.935	46854	32	2.642	7.384	46926	18	21.428	11.602	46998	24	14.214	19.576	47070	15	10.256	25.074
46783	20	7.802	2.642	46855	33	5.688	7.946	46927	48	25.720	11.085	46999	21	14.408	19.574	47071	21	10.786	25.123
46784	23	10.617	2.289	46856	12	7.672	7.272	46928	19	1.856	12.828	47000	25	16.814	19.688	47072	23	13.590	25.014
46785	22	13.922	2.919	46857	19	8.558	7.582	46929	17	5.551	12.054	47001*	27	19.528	19.469	47073	24	15.845	25.088
46786	30	14.795	2.801	46858	19	9.835	7.928	46930*	36	7.096	12.394	47002	16	20.916	19.374	47074	36	19.138	25.414
46787	40	15.619	2.180	46859*	38	10.078	7.930	46931	18	7.526	12.312	47003	15	22.324	19.872	47075	25	21.704	25.358
46788	21	25.214	2.093	46860	17	10.238	7.440	46932	15	9.090	12.686	47004	19	22.854	19.812	47076	28	22.916	25.690
46789	22	0.212	3.543	46861	17	11.497	7.242	46933	14	9.962	12.028	47005	15	25.612	19.438	47077	28	23.933	25.180
46790	22	0.922	3.029	46862	23	14.942	7.360	46934	17	10.315	12.736	47006	27	1.356	20.982				
46791	27	1.228	3.728	46863	16	17.859	7.133	46935	24	18.371	12.808	47007	24	5.434	20.118				
46792	21	1.422	3.151	46864	20	20.818	7.744	46936	17	19.252	12.514	47008	17	16.370	20.136				
46793	24	2.351	3.961	46865	24	21.408	7.986	46937	16	20.250	12.306	47009	16	19.312	20.252				
46794	27	3.062	3.608	46866	24	22.006	7.166	46938	16	21.580	12.934	47010	16	19.570	20.896				
46795	39	3.214	3.919	46867	18	22.273	7.276	46939	24	22.276	12.708	47011	22	21.014	20.236				
46796	32	3.966	3.165	46868	14	22.964	7.430	46940	17	24.048	12.416	47012	14	24.269	20.958				
46797	17	4.700	3.828	46869	16	24.937	7.174	46941	34	24.924	12.639	47013	13	24.880	20.572				
46798	18	5.103	3.197	46870	25	0.592	8.405	46942	20	1.874	13.235	47014	25	0.993	21.416				
46799*	54	5.236	3.749	46871	32	0.998	8.000	46943	30	3.228	13.859	47015	19	1.064	21.956				
46800	22	9.165	3.746	46872	14	1.238	8.035	46944	20	17.506	13.506	47016	14	1.741	21.348				
46801	18	10.603	3.668	46873	32	1.651	8.794	46945	19	17.608	13.656	47017	22	2.988	21.985				
46802	25	12.567	3.933	46874	25	2.114	8.829	46946*	44	19.140	13.824	47018	25	6.628	21.464				
46803	17	15.782	3.910	46875	28	2.764	8.564	46947	18	21.408	13.563	47019	37	8.829	21.658				
46804	33	17.536	3.929	46876	22	3.414	8.227	46948	17	25.641	13.689	47020	21	13.170	21.059				
46805	25	18.746	3.795	46877	21	5.984	8.892	46949	21	1.030	14.218	47021	37	13.374	21.700				
46806*	46	18.910	3.721	46878	20	9.930	8.468	46950*	40	1.328	14.934	47022	16	13.617	21.844				
46807	17	19.104	3.868	46879	16	10.972	8.364	46951	13	3.014	14.086	47023	12	14.736	21.055				
46808	38	21.192	3.512	46880	17	13.392	8.022	46952	16	6.265	14.354	47024	24	15.570	21.148				
46809	16	23.981	3.650	46881	14	13.905	8.700	46953	13	19.624	14.638	47025*	39	20.314	21.152				
46810	19	24.436	3.151	46882	26	15.827	8.291	46954	19	22.395	14.666	47026	16	23.898	21.124				
46811	34	0.130	4.876	46883	20	16.991	8.758	46955	16	23.724	14.404	47027	16	1.914	22.654				
46812	19	1.412	4.021	46884	13	20.776	8.452	46956	22	25.144	14.746	47028	20	2.450	22.541				
46813	17	4.510	4.310	46885	21	21.768	8.732	46957	36	1.933	15.518	47029	17	3.286	22.824				
46814	22	6.410	4.866	46886	17	23.198	8.189	46958	18	3.326	15.084	47030*	50	3.821	22.516				
46815	25	7.172	4.009	46887	14	24.359	8.012	46959	21	8.994	15.890	47031	13	6.506	22.969				
46816	32	12.380	4.874	46888	38	24.825	8.482	46960	23	10.318	15.351	47032	38	8.376	22.318				
46817	16	12.688	4.256	46889	30	0.118	9.114	46961	18	10.496	15.816	47033	19	9.389	22.120				
46818	21	15.259	4.820	46890	17	1.342	9.978	46962	17	23.328	15.137	47034	22	9.584	22.572				
46819	24	15.834	4.545	46891	17	1.365	9.809	46963	36	0.848	16.326	47035	16	16.468	22.298				
46820	20	18.764	4.841	46892	15	1.368	9.068	46964	23	1.918	16.310	47036	21	20.102	22.355				
46821	13	19.140	4.602	46893	21	1.426	9.974	46965	26	2.994	16.647	47037*	52	23.508	22.673				
46822	20	19.948	4.595	46894	17	1.965	9.755	46966*	54	3.006	16.615	47038	44	1.162	23.914				
46823	15	20.340	4.966	46895	22	3.844	9.169	46967	20	9.284	16.898	47039	32	1.449	23.459				
46824	13	24.114	4.908	46896	23	4.065	9.951	46968	27	9.928	16.386	47040	31	2.776	23.625				
46825	23	25.564	4.551	46897	16	4.564	9.314	46969	22	19.191	16.704	47041	17	6.592	23.214				
46826	15	25.650	4.343	46898	15	5.420	9.344	46970	17	23.100	16.227	47042	23	7.995	23.500				
46827*	48	3.586	5.528	46899	17	13.508	9.086	46971	32	25.047	16.066	47043	14	9.696	23.459				
46828	22	4.274	5.892	46900	14	15.223	9.194	46972*	54	5.084	17.849	47044	23	10.134	23.204				
46829	21	5.645	5.233	46901	21	25.608	9.268	46973	12	5.830	17.666	47045	29	10.418	23.206				
46830	21	13.175	5.959	46902	28	25.743	9.696	46974	16	9.962	17.800	47046	17	10.978	23.408				
46831	21	14.080	5.607	46903	23	0.058	10.492	46975	21	10.123	17.916	47047	21	14.678	23.314				
46832	14	14.380	5.752	46904	21	0.508	10.180	46976	23	11.416	17.052	47048*	39	14.811	23.648				
46833	16	15.393	5.056	46905	21	1.774	10.892	46977	14	11.474	17.545	47049	15	15.074	23.265				
46834	21	0.094	6.748	46906	24	2.512	10.137	46978	21	12.208	17.910	47050*	36	22.736	23.964				
46835	14	0.094	6.044	46907	19	3.520	10.540	46979	15	21.719	17.865	47051*	80	22.764	23.836				
46836	35	0.139	6.136	46908	14	5.028	10.178	46980	19	22.200	17.070	47052	27	25.406	23.075				
46837	17	3.086	6.816	46909	20	6.729	10.844	46981	16	22.844	17.454	47053	26	25.628	23.862				
46838	14	4.555	6.442	46910	25	8.959	10.234	46982	14	2.541	18.090	47054*	78	3.364	24.826				
46839	20	5.706	6.286	46911	17	9.244	10.224	46983	34	4.600	18.684	47055	31	4.506	24.476				
46840	25	10.228	6.992	46912	15	14.908	10.479	46984	15	6.926	18.576	47056	36	7.556	24.244				
46841	22	10.608	6.242	46913	27	17.269	10.838	46985	17	12.756	18.502	47057	19	7.662	24.694				
46842*	44	12.325	6.518	46914*	39	20.322	10.796	46986	17	23.714	18.004	47058	32	7.664	24.005				
46843	18	13.324	6.390	46915	15	22.886	10.356	46987	16	23.809	18.258	47059	15	10.590	24.154				
46844	17	13.354	6.484	46916	21	25.533	10.742	46988	18	24.559	18.261	47060	13	10.712	24.284				
46845	23	13.482	6.262	46917	17	25.762	10.348	46989	26	25.716	18.124	47061	32	12.118	24.638				



47136	8	20.434	2.758	47208*	39	22.505	8.694	47280*	34	21.078	11.854	47352	12	18.574	13.019	47424	10	19.023	16.502
47137	11	21.358	2.047	47209	8	22.656	8.802	47281	24	21.102	11.357	47353*	33	18.994	13.038	47425*	45	20.876	16.305
47138*	32	24.800	2.757	47210	17	23.404	8.376	47282	32	21.262	11.802	47354	8	19.283	13.362	47426	8	20.910	16.810
47139	10	1.658	3.873	47211	23	23.504	8.700	47283	10	21.285	11.007	47355	8	19.814	13.346	47427	14	21.056	16.054
47140	8	2.108	3.369	47212	12	24.080	8.488	47284	18	21.305	11.401	47356	28	19.982	13.346	47428	8	21.300	16.589
47141	11	12.271	3.723	47213	8	24.455	8.286	47285	11	21.700	11.426	47357	10	20.018	13.296	47429	14	21.649	16.527
47142	13	12.331	3.030	47214	8	3.364	9.469	47286	33	22.065	11.940	47358	29	20.132	13.456	47430	24	23.766	16.508
47143	11	16.538	3.295	47215	16	3.503	9.894	47287	29	22.104	11.230	47359	9	20.324	13.328	47431	11	24.912	16.054
47144	19	16.674	3.658	47216	12	5.044	9.156	47288	26	22.339	11.206	47360	29	20.452	13.116	47432	11	25.764	16.665
47145*	35	17.509	3.042	47217*	38	6.424	9.086	47289	9	22.398	11.917	47361	17	20.458	13.928	47433	8	0.056	17.322
47146	9	17.672	3.142	47218	14	9.890	9.313	47290	44	22.410	11.691	47362	16	20.544	13.026	47434	16	7.372	17.915
47147	16	18.585	3.780	47219	14	13.770	9.278	47291	13	22.714	11.757	47363	35	20.765	13.281	47435	17	8.478	17.440
47148	13	18.792	3.159	47220	19	15.974	9.827	47292	25	23.700	11.318	47364	25	20.954	13.436	47436	14	9.574	17.993
47149	35	19.328	3.179	47221	8	16.676	9.874	47293	36	24.128	11.446	47365	27	21.237	13.078	47437	13	11.292	17.424
47150*	37	22.128	3.071	47222	10	17.124	9.134	47294	8	24.456	11.048	47366	29	21.275	13.465	47438	13	12.016	17.880
47151*	33	24.422	3.743	47223	8	18.758	9.069	47295	13	0.078	12.956	47367	34	21.540	13.461	47439	13	13.730	17.354
47152	9	3.254	4.755	47224	22	18.788	9.648	47296	27	2.725	12.850	47368	8	21.564	13.503	47440*	27	13.796	17.613
47153	11	5.788	4.860	47225	8	20.730	9.758	47297	10	4.268	12.258	47369	11	22.254	13.912	47441	18	17.636	17.444
47154	8	8.636	4.814	47226	8	20.953	9.386	47298	10	7.430	12.917	47370	21	22.418	13.196	47442	10	21.314	17.846
47155*	34	16.000	4.066	47227	14	21.255	9.226	47299	10	7.940	12.943	47371	10	23.022	13.518	47443	14	22.320	17.325
47156	14	16.022	4.057	47228	20	21.464	9.053	47300	13	9.546	12.005	47372	8	23.171	13.275	47444*	36	23.194	17.682
47157	10	16.740	4.386	47229	22	21.846	9.334	47301*	35	14.334	12.196	47373	13	25.830	13.755	47445	13	24.395	17.623
47158	30	19.639	4.248	47230	8	22.564	9.963	47302	9	16.262	12.530	47374	10	2.975	14.952	47446	20	3.594	18.321
47159	23	20.476	4.208	47231	10	23.057	9.568	47303	8	16.908	12.110	47375	8	5.298	14.910	47447*	80	6.814	18.432
47160	14	4.324	5.324	47232	29	23.534	9.116	47304	20	17.540	12.174	47376	11	6.274	14.766	47448	8	9.394	18.776
47161	13	19.091	5.483	47233	11	23.805	9.950	47305*	34	18.088	12.504	47377	12	8.072	14.798	47449	26	14.451	18.597
47162	27	19.248	5.089	47234	29	24.447	9.162	47306	27	19.115	12.703	47378	9	11.550	14.254	47450	24	21.976	18.300
47163	13	19.557	5.028	47235	15	24.745	9.511	47307	9	19.196	12.664	47379	13	11.585	14.876	47451	8	24.902	18.826
47164	11	24.586	5.930	47236	13	25.498	9.224	47308	16	19.315	12.710	47380	14	12.070	14.486	47452	23	25.119	18.212
47165	8	4.802	6.078	47237	8	3.531	10.544	47309	24	19.624	12.898	47381	23	14.381	14.260	47453	9	25.408	18.962
47166*	27	5.334	6.754	47238	26	8.098	10.397	47310	14	19.824	12.379	47382	24	14.400	14.577	47454	16	25.500	18.144
47167	11	8.184	6.390	47239*	36	11.145	10.873	47311	31	20.030	12.596	47383	12	14.494	14.334	47455	18	9.552	19.258
47168*	34	13.680	6.062	47240	8	15.056	10.438	47312	27	20.405	12.888	47384	30	14.950	14.178	47456	13	13.069	19.212
47169	25	15.106	6.551	47241*	93	18.209	10.045	47313	21	20.520	12.057	47385	20	15.770	14.317	47457	10	15.132	19.618
47170	10	17.160	6.864	47242	9	19.304	10.795	47314	34	20.729	12.104	47386	8	16.034	14.406	47458	31	15.637	19.664
47171	8	18.274	6.693	47243	8	19.450	10.921	47315	9	20.801	12.948	47387	15	17.112	14.050	47459	32	18.916	19.145
47172	8	18.624	6.173	47244	35	20.354	10.544	47316	29	20.818	12.400	47388	14	17.208	14.263	47460	12	23.288	19.436
47173*	33	20.630	6.502	47245	11	20.881	10.306	47317	10	20.864	12.158	47389	28	19.470	14.128	47461	10	24.034	19.170
47174	21	21.128	6.817	47246	33	21.412	10.773	47318	18	20.868	12.528	47390	24	19.744	14.066	47462	26	25.174	19.924
47175	10	21.405	6.132	47247	25	21.506	10.748	47319	10	20.964	12.357	47391	24	20.304	14.070	47463	12	10.609	20.404
47176	8	22.750	6.752	47248	11	21.562	10.596	47320	27	21.012	12.812	47392	20	21.064	14.205	47464	8	13.735	20.925
47177	9	24.346	6.269	47249	14	21.980	10.400	47321	20	21.050	12.981	47393	12	21.719	14.282	47465	8	15.280	20.494
47178	10	4.066	7.196	47250	13	22.309	10.664	47322	11	21.055	12.966	47394	16	21.888	14.580	47466	21	16.154	20.916
47179	8	11.476	7.044	47251	31	22.376	10.477	47323	25	21.088	12.546	47395	13	22.616	14.625	47467	8	16.276	20.260
47180	10	12.712	7.600	47252	15	22.424	10.560	47324	19	21.121	12.346	47396*	34	22.914	14.048	47468	11	17.264	20.986
47181	14	18.444	7.019	47253	12	22.455	10.649	47325	31	21.236	12.245	47397	10	22.916	14.177	47469	8	20.476	20.586
47182	15	18.685	7.936	47254	10	22.612	10.442	47326	23	21.369	12.357	47398	8	23.876	14.977	47470	25	21.108	20.238
47183	11	19.397	7.494	47255	19	22.656	10.716	47327	14	21.444	12.466	47399	8	24.470	14.812	47471	20	4.684	21.586
47184	11	19.608	7.756	47256	28	22.783	10.396	47328	35	21.519	12.984	47400	8	25.526	14.647	47472	22	6.452	21.979
47185	12	19.674	7.935	47257	14	22.808	10.183	47329	32	21.533	12.604	47401	12	6.200	15.258	47473*	47	6.604	21.392
47186	12	19.763	7.790	47258	9	22.970	10.451	47330	22	21.686	12.698	47402	8	6.354	15.972	47474*	33	8.000	21.534
47187	15	22.674	7.036	47259	8	23.012	10.316	47331	8	21.710	12.166	47403*	35	16.574	15.777	47475	10	9.224	21.162
47188	28	22.904	7.470	47260	13	23.314	10.213	47332	31	21.863	12.219	47404	14	16.921	15.002	47476	10	10.954	21.530
47189	12	24.551	7.706	47261	8	23.417	10.294	47333	29	21.966	12.138	47405	16	18.644	15.076	47477	13	12.768	21.340
47190	32	2.566	8.696	47262	8	24.439	10.418	47334	10	21.986	12.936	47406	12	19.234	15.424	47478	18	15.264	21.369
47191	11	7.159	8.382	47263	14	25.169	10.153	47335	8	22.114	12.050	47407	14	19.514	15.506	47479	13	15.368	21.787
47192	12	8.272	8.821	47264	13	25.926	10.827	47336	18	22.246	12.962	47408	14	19.748	15.202	47480*	36	17.488	21.960
47193	8	9.421	8.143	47265*	35	3.498	11.285	47337	14	22.286	12.147	47409	9	20.333	15.736	47481	22	19.845	21.297
47194	9	12.976	8.520	47266	28	7.190	11.766	47338	8	22.313	12.294	47410	15	20.372	15.231	47482	9	19.896	21.511
47195	12	13.270	8.105	47267	15	11.374	11.422	47339	8	22.338	12.642	47411	12	24.280	15.284	47483	16	20.159	21.298
47196	11	15.566	8.636	47268	10	16.195	11.100	47340	12	22.724	12.622	47412*	34	24.430	15.603	47484	11	20.754	21.134
47197	30	16.900	8.917	47269	11	16.366	11.906	47341	16	22.898	12.636	47413	10	24.627	15.906	47485	10	21.646	21.679
47198	15	16.984	8.68																



47496	9	23.200	22.667	47562	10	7.185	1.364	47634*	38	17.944	4.433	47706	11	24.137	8.525	47778	13	0.706	12.828
47497	12	24.242	22.917	47563	18	7.826	1.406	47635	9	20.860	4.130	47707	22	24.466	8.019	47779	20	0.880	12.837
47498	12	3.352	23.277	47564	8	9.463	1.596	47636	10	2.550	5.038	47708	25	25.784	8.952	47780	32	1.083	12.743
47499	11	5.545	23.093	47565	51	10.364	1.738	47637	12	2.858	5.034	47709	11	0.574	9.009	47781	47	9.838	12.203
47500	10	12.792	23.630	47566	13	11.549	1.962	47638	8	3.984	5.969	47710	9	0.990	9.766	47782	30	11.838	12.376
47501	19	18.280	23.054	47567	9	11.777	1.346	47639	8	4.298	5.226	47711	24	1.458	9.308	47783	10	18.228	12.682
47502	8	19.404	23.478	47568	8	13.640	1.456	47640	9	5.640	5.452	47712	28	2.372	9.339	47784	9	25.146	12.158
47503	10	20.688	23.948	47569	25	13.973	1.504	47641	14	6.803	5.492	47713	18	2.676	9.682	47785	19	25.974	12.547
47504	21	21.984	23.963	47570*	31	15.774	1.721	47642	20	8.875	5.666	47714	18	3.423	9.384	47786	21	0.234	13.175
47505*	44	22.320	23.505	47571	9	16.972	1.904	47643	11	10.032	5.291	47715*	38	3.942	9.722	47787	23	0.412	13.406
47506	11	24.240	23.544	47572	8	17.061	1.148	47644	8	10.706	5.036	47716	9	6.353	9.843	47788	12	1.018	13.718
47507	16	24.242	23.416	47573	9	17.468	1.236	47645	11	12.821	5.494	47717	8	8.070	9.892	47789	12	1.165	13.473
47508*	20	0.694	24.204	47574*	43	17.695	1.418	47646	8	13.065	5.781	47718	35	9.668	9.712	47790	17	1.340	13.088
47509*	60	0.714	24.073	47575	10	18.058	1.339	47647	9	14.464	5.973	47719	13	9.700	9.488	47791	8	1.793	13.306
47510	17	3.585	24.059	47576	23	20.192	1.102	47648	10	14.989	5.420	47720	9	17.520	9.200	47792	14	3.830	13.908
47511	20	4.862	24.674	47577	10	21.286	1.614	47649	10	15.262	5.801	47721	10	17.732	9.322	47793	19	3.962	13.053
47512	31	6.338	24.377	47578	23	22.192	1.163	47650	10	15.384	5.802	47722	8	18.406	9.316	47794	12	4.616	13.436
47513	14	6.580	24.566	47579	11	23.662	1.950	47651	11	17.560	5.722	47723	12	18.440	9.394	47795	14	4.758	13.372
47514*	55	7.775	24.926	47580	17	23.920	1.880	47652	34	18.542	5.341	47724	8	22.677	9.938	47796	8	5.738	13.824
47515	12	13.126	24.654	47581*	36	2.618	2.927	47653	9	22.784	5.855	47725	25	24.559	9.820	47797	8	6.766	13.656
47516	13	15.072	24.142	47582	8	4.234	2.810	47654	11	22.930	5.016	47726	14	0.258	10.876	47798	17	7.472	13.026
47517	22	15.085	24.281	47583	18	4.272	2.496	47655	8	22.934	5.722	47727	31	0.322	10.688	47799	13	9.556	13.150
47518	10	15.970	24.033	47584	17	5.108	2.142	47656	24	24.610	5.038	47728	19	0.372	10.770	47800*	80	12.638	13.821
47519	13	17.218	24.280	47585	16	5.471	2.806	47657	19	25.127	5.030	47729	13	0.404	10.858	47801	9	13.362	13.383
47520	9	24.922	24.278	47586	22	6.768	2.961	47658	16	25.594	5.562	47730	11	0.559	10.648	47802	12	15.638	13.155
47521	27	25.833	24.106	47587	22	9.138	2.366	47659	12	1.706	6.910	47731	22	0.608	10.922	47803	19	16.497	13.548
47522	16	1.906	25.402	47588	10	10.353	2.181	47660	11	2.222	6.450	47732	30	0.728	10.600	47804	8	17.562	13.122
47523	20	4.036	25.830	47589*	33	10.366	2.058	47661	13	2.457	6.107	47733	18	0.749	10.388	47805	11	17.823	13.219
47524	8	7.602	25.770	47590	19	13.030	2.514	47662	10	4.359	6.088	47734	12	0.916	10.652	47806	11	20.448	13.219
47525	12	9.154	25.500	47591	10	14.032	2.871	47663	8	5.758	6.558	47735	12	0.956	10.519	47807*	41	20.724	13.072
47526	13	9.418	25.771	47592	12	17.994	2.474	47664	11	5.920	6.220	47736	14	1.254	10.407	47808	8	22.057	13.180
47527	17	11.299	25.289	47593	12	18.184	2.551	47665	9	9.929	6.570	47737	8	1.359	10.486	47809	38	25.482	13.414
47528	26	14.804	25.790	47594	18	21.966	2.933	47666	40	10.759	6.886	47738	14	1.744	10.135	47810	9	0.208	14.660
47529	18	16.034	25.716	47595	8	22.480	2.687	47667	13	11.604	6.258	47739	10	2.386	10.594	47811	14	0.256	14.122
47530	8	17.274	25.600	47596	34	24.626	2.341	47668	10	13.590	6.208	47740	15	3.108	10.320	47812	13	0.634	14.832
47531	13	23.535	25.141	47597*	31	2.257	3.921	47669	11	14.300	6.880	47741	14	3.877	10.980	47813*	38	0.918	14.250
47532	15	24.554	25.493	47598	10	4.360	3.089	47670	21	18.293	6.680	47742	16	5.679	10.548	47814	12	0.924	14.378
				47599*	48	5.748	3.300	47671	9	19.586	6.182	47743	16	6.150	10.676	47815	8	2.491	14.992
				47600	12	8.592	3.731	47672	20	20.695	6.518	47744	27	6.202	10.956	47816	18	7.419	14.158
				47601	24	8.852	3.318	47673	18	0.563	7.242	47745*	34	6.982	10.529	47817	10	9.939	14.849
				47602	16	8.932	3.402	47674	26	0.798	7.672	47746	17	10.917	10.045	47818	10	14.630	14.393
				47603*	31	9.384	3.185	47675	14	2.452	7.882	47747	14	11.810	10.007	47819	8	17.277	14.446
				47604	19	10.682	3.185	47676	10	4.286	7.922	47748	28	11.954	10.552	47820	11	17.947	14.333
				47605	18	12.084	3.717	47677	10	4.706	7.026	47749	12	13.899	10.334	47821	11	20.049	14.460
				47606	13	13.723	3.205	47678	13	5.688	7.148	47750	8	15.231	10.775	47822	8	21.117	14.058
				47607	14	13.970	3.642	47679	24	6.128	7.804	47751	11	18.760	10.976	47823	9	21.629	14.198
				47608	10	14.054	3.263	47680	29	6.467	7.318	47752	27	22.368	10.984	47824	8	23.580	14.642
				47609	14	15.299	3.251	47681*	43	6.684	7.356	47753	10	22.894	10.176	47825	9	24.140	14.540
				47610	10	15.552	3.684	47682*	58	8.782	7.657	47754	12	22.914	10.568	47826	13	25.464	14.922
				47611	28	16.568	3.236	47683	8	9.426	7.392	47755	11	23.166	10.787	47827	8	1.896	15.166
				47612	17	19.872	3.340	47684	8	13.229	7.527	47756	29	0.062	11.446	47828	13	2.306	15.462
				47613	30	20.101	3.507	47685	11	16.478	7.673	47757	28	0.296	11.417	47829*	32	2.462	15.780
				47614	9	24.983	3.501	47686	11	16.402	7.245	47758	45	0.374	11.900	47830*	32	2.826	15.299
				47615	8	2.408	4.102	47687	8	17.418	7.036	47759	16	0.682	11.962	47831	9	4.762	15.239
				47616	8	3.414	4.396	47688*	32	18.366	7.138	47760	24	1.661	11.508	47832	10	7.162	15.498
				47617	8	3.526	4.588	47689	17	18.392	7.128	47761	35	2.092	11.630	47833*	45	8.608	15.286
				47618	9	4.499	4.638	47690	9	19.984	7.542	47762	10	4.190	11.981	47834	16	9.676	15.758
				47619	10	4.520	4.782	47691	30	20.866	7.586	47763	8	4.351	11.036	47835	9	14.413	15.647
				47620	10	4.563	4.798	47692	12	21.424	7.158	47764	20	4.642	11.359	47836	11	14.422	15.642
				47621	9	5.656	4.762	47693*	42	0.420	8.902	47765	10	6.314	11.615	47837	16	16.807	15.638
				47622	11	5.662	4.523	47694	16	1.316	8.570	47766	9	8.154	11.024	47838	14	16.942	15.242
				47623	16	6.947	4.821	47695	28	1.420	8.893	47767	8	15.450	11.736	47839*	26	18.126	15.146
				47624	10	7.378	4.668	47696	8	1.995	8.672	47768	11	16.254	11.556	47840	31	25.511	15.268
				47625	10	8.463	4.828	47697	11	7.057	8.380	47769*	29	17.880	11.196	47841	23	1.812	16.696
				47626	11	8.746	4.027	47698	14	7.120	8.820	47770	19	23.494	11.903	47842	12	2.662	16.080
				47627	8	9.469	4.881	47699	14	7.232	8.264	47771	9	25.947	11.448	47843	11	2.952	16.220
				47628	17	9.624	4.897	47700	8										



47850	13	16.747	16.332	47922	21	3.275	20.088	47994	11	10.563	23.868	48056	13	6.054	0.174	48128	9	15.332	2.715
47851	8	16.900	16.736	47923	20	5.986	20.811	47995	10	10.636	23.909	48057	12	6.988	0.218	48129	9	16.416	2.094
47852	10	18.551	16.618	47924*	28	9.381	20.892	47996	10	11.271	23.096	48058	12	7.132	0.946	48130	16	16.915	2.535
47853	11	21.638	16.324	47925	21	9.442	20.767	47997	11	11.840	23.968	48059	11	7.785	0.990	48131	10	16.916	2.492
47854*	32	21.726	16.918	47926	11	10.262	20.248	47998	8	12.764	23.126	48060	10	8.339	0.230	48132	14	17.566	2.941
47855	14	22.270	16.028	47927	14	10.766	20.668	47999	11	14.658	23.049	48061	11	8.814	0.525	48133	9	18.212	2.022
47856	28	25.068	16.404	47928*	33	10.773	20.709	48000	12	16.392	23.292	48062	18	9.106	0.438	48134	10	18.279	2.043
47857	18	25.794	16.841	47929	13	12.652	20.674	48001	18	17.324	23.528	48063*	40	9.552	0.890	48135	12	18.608	2.880
47858	14	0.380	17.534	47930*	33	12.824	20.582	48002	14	18.108	23.614	48064	22	10.252	0.980	48136	13	19.464	2.191
47859*	40	1.256	17.878	47931	14	14.538	20.502	48003	9	19.747	23.074	48065	11	10.496	0.279	48137	20	19.502	2.387
47860	12	2.460	17.800	47932	15	18.710	20.094	48004	16	20.526	23.936	48066	11	10.549	0.358	48138	10	20.914	2.514
47861	20	8.712	17.087	47933	20	19.223	20.752	48005	12	20.837	23.848	48067	11	12.166	0.621	48139	32	21.152	2.594
47862	16	10.743	17.448	47934	12	19.699	20.854	48006	11	21.011	23.456	48068	20	12.454	0.693	48140	16	21.513	2.534
47863	10	14.411	17.236	47935	11	20.774	20.824	48007	16	21.466	23.662	48069	12	12.576	0.564	48141	13	21.522	2.449
47864	16	18.124	17.666	47936	10	23.241	20.913	48008*	20	23.022	23.940	48070	11	13.504	0.422	48142	12	21.854	2.238
47865*	55	18.551	17.959	47937*	44	23.820	20.536	48009	12	23.644	23.748	48071*	35	14.763	0.244	48143	9	21.960	2.476
47866	21	18.818	17.672	47938	13	24.751	20.514	48010*	43	23.936	23.773	48072	11	15.626	0.785	48144	22	22.285	2.957
47867	17	18.912	17.336	47939	11	24.757	21.450	48011	32	24.414	23.701	48073	9	18.064	0.646	48145	24	22.335	2.270
47868	10	21.308	17.134	47940	18	0.523	21.462	48012	12	24.974	23.982	48074	12	18.632	0.894	48146	11	22.854	2.421
47869	13	21.450	17.528	47941	10	8.152	21.288	48013	23	25.678	23.728	48075	43	18.675	0.751	48147	9	22.903	2.557
47870	8	22.652	17.022	47942	25	8.238	21.067	48014	20	0.156	24.178	48076	23	18.766	0.289	48148	26	23.039	2.612
47871	9	23.450	17.044	47943	11	8.749	21.230	48015	10	3.102	24.444	48077	34	18.873	0.616	48149	18	23.402	2.201
47872	17	25.424	17.112	47944	18	9.034	21.072	48016	9	3.506	24.028	48078	12	19.366	0.377	48150	22	23.507	2.165
47873	21	0.052	18.518	47945	12	9.128	21.450	48017	20	4.005	24.256	48079	10	19.488	0.798	48151	24	24.680	2.000
47874	9	0.204	18.453	47946	9	13.050	21.942	48018	11	6.460	24.968	48080	23	20.074	0.358	48152	10	25.034	2.112
47875	16	3.193	18.377	47947	25	13.442	21.128	48019	17	7.873	24.832	48081	28	21.252	0.614	48153	60	25.116	2.989
47876	14	3.573	18.302	47948	20	15.167	21.433	48020	22	8.082	24.437	48082	9	22.487	0.969	48154	16	25.544	2.752
47877	15	4.782	18.047	47949	13	15.925	21.300	48021	11	9.636	24.168	48083	22	23.184	0.229	48155	14	25.723	2.561
47878*	38	5.454	18.904	47950	10	16.078	21.776	48022	8	10.100	24.952	48084	34	23.615	0.182	48156	13	25.740	2.270
47879	9	9.712	18.946	47951	12	16.600	21.498	48023	9	12.723	24.395	48085	40	25.104	0.669	48157	9	25.954	2.923
47880	14	12.872	18.734	47952	9	17.614	21.060	48024	12	18.452	24.307	48086	22	25.481	0.724	48158	11	2.578	3.833
47881	11	15.482	18.032	47953	9	18.382	21.030	48025	18	20.198	24.488	48087	35	25.672	0.146	48159	15	7.386	3.875
47882	8	15.558	18.574	47954	30	18.530	21.856	48026	11	21.963	24.995	48088	10	1.644	1.722	48160	11	7.774	3.128
47883	11	15.836	18.622	47955	15	19.464	21.938	48027	31	22.018	24.872	48089	8	3.392	1.068	48161	17	10.474	3.069
47884	10	17.081	18.770	47956	10	20.399	21.490	48028	26	22.358	24.172	48090	10	5.434	1.642	48162	10	10.647	3.498
47885	10	17.486	18.486	47957	13	20.454	21.702	48029	14	1.730	25.331	48091	8	5.706	1.917	48163	10	10.906	3.238
47886	10	22.434	18.322	47958	25	20.894	21.264	48030	16	2.748	25.665	48092	8	5.955	1.385	48164	12	12.470	3.909
47887*	46	23.819	18.016	47959	8	22.126	22.858	48031	9	3.726	25.658	48093*	34	6.350	1.533	48165	10	12.508	3.268
47888	17	25.718	18.439	47960*	66	22.781	22.416	48032*	53	4.913	25.018	48094	13	7.396	1.040	48166	11	13.412	3.055
47889	13	1.386	19.630	47961	10	1.349	22.882	48033	20	6.544	25.192	48095	14	10.714	1.906	48167	23	13.481	3.197
47890	12	2.126	19.353	47962	19	6.888	22.487	48034	10	11.492	25.849	48096	12	12.688	1.273	48168*	41	13.666	3.488
47891	11	3.496	19.122	47963	13	6.978	22.728	48035	9	17.767	25.040	48097	9	13.566	1.353	48169	10	14.126	3.377
47892*	34	4.748	19.380	47964	18	9.204	22.783	48036	20	19.262	25.922	48098	10	13.694	1.949	48170	21	14.214	3.385
47893	16	9.728	19.892	47965	10	9.414	22.907	48037	8	21.246	25.200	48099	11	13.848	1.368	48171	12	14.256	3.030
47894	10	12.410	19.558	47966	13	10.336	22.661	48038	11	22.235	25.327	48100	14	14.141	1.717	48172	11	14.292	3.167
47895	21	12.689	19.873	47967*	43	10.428	22.741	48039	18	25.694	25.816	48101	9	14.498	1.484	48173	9	16.282	3.374
47896	20	12.800	19.640	47968	36	10.864	22.544					48102	11	14.566	1.916	48174	8	16.502	3.360
47897	9	13.385	19.103	47969	11	11.274	22.414					48103	9	14.702	1.435	48175	22	18.821	3.372
47898	34	13.876	19.683	47970	8	13.836	22.416					48104	15	14.926	1.402	48176	14	19.133	3.015
47899	8	14.562	19.414	47971	8	14.664	22.416					48105	10	15.386	1.561	48177	16	19.202	3.872
47900	10	15.116	19.404	47972	9	16.594	22.544					48106	34	18.144	1.093	48178	11	19.498	3.039
47901	9	15.284	19.892	47973	18	17.116	22.066					48107	9	19.192	1.008	48179	24	19.601	3.624
47902	9	17.243	19.334	47974	10	18.386	22.147					48108	10	20.738	1.628	48180	9	20.272	3.342
47903	10	17.604	19.002	47975*	46	18.699	22.068					48109	32	21.857	1.047	48181	8	20.392	3.769
47904	18	18.370	19.391	47976	11	18.906	22.408					48110	12	21.940	1.578	48182	14	21.054	3.858
47905*	30	18.610	19.838	47977	12	19.818	22.010					48111	15	23.050	1.055	48183	24	21.573	3.780
47906	8	18.712	19.692	47978	10	21.554	22.616					48112	9	23.102	1.652	48184	10	22.023	3.751
47907	10	18.935	19.919	47979	8	23.585	22.410					48113	33	23.884	1.494	48185	8	22.312	3.770
47908	10	19.017	19.516	47980	20	23.913	22.950					48114	13	1.242	2.297	48186	31	22.399	3.194
47909	12	19.360	19.430	47981	12	24.633	23.716					48115	14	1.496	2.224	48187	13	22.714	3.285
47910	21	20.276	19.684	47982	10	25.428	23.018					48116	27	2.206	2.675	48188	11	22.928	3.278
47911	25	20.320	19.688	47983*	44	0.482	23.094					48117	9	3.722	2.228	48189	12	23.036	3.977
47912	22	20.707	19.318	47984*	39	0.808	23.594					48118	25	3.905	2.114	48190	9	23.372	3.565
47913*	36	21.808	19.448	47985	13	2.396	23.719					48119	12	5.069	2.785	48191	8	23.374	3.186
47914	10	21.901	19.528	47986	12	2.403	23.824												



48200	10	9.286	4.462	48272	11	22.216	5.024	48344	9	8.708	7.148	48416	21	8.547	9.596	48488	20	21.364	10.632
48201	15	9.530	4.124	48273	13	22.297	5.870	48345	10	11.034	7.166	48417	11	10.346	9.300	48489	8	21.569	10.466
48202	12	9.649	4.838	48274	8	22.321	5.386	48346	30	13.919	7.034	48418	25	10.474	9.432	48490	11	21.576	10.528
48203	8	9.944	4.116	48275	9	22.326	5.912	48347	10	14.426	7.462	48419	11	10.686	9.787	48491	22	21.712	10.254
48204	10	9.955	4.160	48276	9	22.532	5.554	48348	25	14.698	7.696	48420	8	10.710	9.894	48492	24	21.762	10.636
48205	21	10.204	4.692	48277	18	22.902	5.006	48349	9	15.140	7.772	48421	9	11.332	9.596	48493	20	21.955	10.682
48206	16	12.038	4.914	48278*	60	22.953	5.756	48350*	60	15.724	7.604	48422	12	11.541	9.470	48494	11	22.114	10.676
48207	9	12.256	4.228	48279	8	23.733	5.485	48351	8	16.178	7.641	48423	12	12.014	9.185	48495	9	22.363	10.082
48208	22	12.786	4.765	48280	14	24.914	5.312	48352	9	17.293	7.598	48424	13	14.324	9.554	48496	20	22.364	10.684
48209	16	13.040	4.855	48281	8	25.057	5.494	48353	9	17.579	7.545	48425*	34	14.436	9.395	48497	13	22.380	10.315
48210	15	16.658	4.564	48282	25	25.302	5.916	48354	9	18.670	7.794	48426	12	14.694	9.568	48498	23	22.576	10.605
48211	8	17.748	4.188	48283	16	25.382	5.339	48355	12	19.176	7.405	48427	18	15.044	9.115	48499*	40	22.842	10.493
48212	17	17.832	4.439	48284	10	0.408	6.214	48356	10	19.461	7.896	48428	10	15.200	9.776	48500	28	23.006	10.886
48213	10	18.515	4.405	48285	12	3.172	6.826	48357	25	19.596	7.866	48429	28	15.218	9.724	48501	33	23.236	10.720
48214	18	18.854	4.920	48286	11	5.965	6.256	48358	13	21.025	7.386	48430	8	15.224	9.210	48502	44	23.274	10.696
48215	23	19.219	4.870	48287	10	6.726	6.138	48359	10	21.824	7.675	48431	12	16.296	9.180	48503	37	23.294	10.708
48216	13	19.696	4.815	48288	13	6.956	6.142	48360	10	22.180	7.281	48432	8	17.576	9.518	48504	65	23.599	10.161
48217	10	19.892	4.057	48289	9	9.316	6.672	48361	8	22.578	7.816	48433	9	17.865	9.196	48505	8	23.917	10.424
48218	12	20.615	4.748	48290	20	9.688	6.466	48362	12	22.661	7.018	48434	24	17.918	9.092	48506*	23	23.932	10.164
48219	9	21.059	4.884	48291	10	9.714	6.450	48363	12	22.838	7.088	48435*	27	18.154	9.086	48507	15	24.334	10.454
48220	8	21.296	4.158	48292	10	10.072	6.464	48364	25	23.277	7.134	48436	40	18.554	9.707	48508	8	24.342	10.816
48221*	46	21.310	4.862	48293	16	10.968	6.656	48365	18	23.720	7.434	48437	15	19.450	9.508	48509	11	24.678	10.914
48222	11	21.331	4.636	48294	9	11.223	6.670	48366	11	1.800	8.866	48438	9	19.513	9.406	48510	15	25.216	10.455
48223	19	21.763	4.956	48295	11	11.560	6.504	48367	23	2.120	8.356	48439	11	19.572	9.102	48511	12	25.319	10.274
48224	12	21.977	4.574	48296	10	11.944	6.414	48368	9	3.050	8.446	48440	8	19.659	9.776	48512	13	25.376	10.276
48225	25	21.992	4.616	48297	9	12.527	6.456	48369	14	4.730	8.260	48441	10	20.031	9.016	48513	8	25.409	10.909
48226	9	22.702	4.898	48298	8	12.823	6.268	48370	17	4.808	8.419	48442	23	20.896	9.876	48514	25	25.420	10.476
48227	9	23.412	4.874	48299	10	14.552	6.910	48371	10	5.746	8.012	48443	10	21.558	9.708	48515	8	25.496	10.613
48228	9	24.922	4.076	48300	43	14.846	6.874	48372	12	7.792	8.854	48444	10	22.006	9.736	48516	10	25.884	10.263
48229	10	25.127	4.798	48301	13	15.139	6.124	48373	10	9.238	8.200	48445	18	22.736	9.614	48517	30	25.919	10.311
48230	38	25.204	4.426	48302	9	15.179	6.945	48374	9	9.420	8.618	48446	9	23.159	9.660	48518	15	25.938	10.625
48231	11	0.547	5.374	48303	12	16.576	6.499	48375	8	10.088	8.216	48447	10	23.432	9.407	48519	35	25.966	10.390
48232	21	2.226	5.374	48304	10	17.676	6.362	48376	11	12.843	8.498	48448	31	24.254	9.797	48520	22	0.060	11.349
48233	15	2.740	5.359	48305	30	18.000	6.836	48377	8	13.399	8.172	48449	9	24.553	9.083	48521	10	0.856	11.140
48234	13	3.216	5.886	48306	11	18.746	6.838	48378	14	13.422	8.058	48450	16	25.370	9.196	48522	10	3.647	11.764
48235	8	6.721	5.094	48307*	40	18.906	6.244	48379*	27	13.692	8.921	48451	11	25.715	9.310	48523	9	4.528	11.897
48236	11	7.770	5.364	48308	15	19.160	6.796	48380	12	14.729	8.034	48452	8	25.778	9.164	48524	19	4.880	11.938
48237	10	8.333	5.872	48309	13	19.373	6.358	48381	10	14.811	8.786	48453	16	25.827	9.394	48525	21	5.122	11.780
48238	20	9.015	5.628	48310	9	19.574	6.256	48382	11	15.480	8.524	48454	13	25.946	9.090	48526	22	5.182	11.764
48239	18	9.086	5.676	48311	10	19.833	6.952	48383	12	16.994	8.444	48455	8	0.576	10.533	48527	13	6.280	11.476
48240	8	9.508	5.893	48312	29	19.930	6.852	48384	16	17.680	8.178	48456	11	0.604	10.926	48528	11	6.624	11.376
48241	15	9.712	5.088	48313	8	20.300	6.482	48385	22	17.860	8.177	48457	20	2.239	10.156	48529	12	7.848	11.892
48242	10	10.086	5.270	48314	10	20.602	6.174	48386	11	19.169	8.785	48458*	33	4.018	10.702	48530	18	9.323	11.330
48243	28	10.182	5.992	48315	10	20.888	6.377	48387	8	19.612	8.983	48459	8	4.094	10.922	48531	9	10.206	11.210
48244	12	11.006	5.577	48316	20	21.254	6.509	48388	24	19.690	8.785	48460*	20	7.830	10.414	48532	9	11.234	11.620
48245	10	11.017	5.567	48317	15	21.414	6.165	48389	8	19.709	8.162	48461	8	10.670	10.481	48533	69	12.113	11.084
48246	10	13.124	5.064	48318	10	21.644	6.296	48390	8	19.786	8.439	48462	12	10.684	10.129	48534	8	12.870	11.253
48247	15	13.174	5.640	48319	29	21.802	6.589	48391	12	20.114	8.782	48463	8	14.068	10.205	48535*	31	15.369	11.378
48248	10	13.439	5.068	48320	9	21.844	6.984	48392	8	20.402	8.346	48464	8	14.368	10.021	48536	9	15.412	11.771
48249	15	13.604	5.284	48321	8	22.038	6.477	48393	11	20.949	8.510	48465	16	14.478	10.848	48537	12	15.526	11.960
48250	10	15.025	5.070	48322	8	22.416	6.616	48394	15	21.075	8.964	48466	44	15.515	10.846	48538	9	15.554	11.647
48251	21	17.390	5.036	48323	36	22.746	6.292	48395	11	21.103	8.040	48467	8	15.561	10.309	48539	8	16.008	11.239
48252	9	17.630	5.856	48324	27	22.922	6.652	48396	20	21.116	8.935	48468	20	16.828	10.718	48540	11	16.315	11.144
48253	13	17.744	5.664	48325	8	23.120	6.716	48397	14	21.338	8.796	48469	9	17.069	10.096	48541	8	16.892	11.122
48254	24	17.762	5.667	48326	9	23.167	6.601	48398	8	21.470	8.354	48470	34	17.191	10.354	48542	15	17.246	11.596
48255	10	17.803	5.660	48327	13	23.306	6.702	48399	11	21.604	8.126	48471	14	17.305	10.235	48543	9	17.384	11.488
48256	13	19.201	5.584	48328	24	23.515	6.723	48400	10	21.615	8.890	48472	9	17.410	10.749	48544	11	17.633	11.333
48257	13	19.936	5.204	48329	9	23.540	6.422	48401	33	21.762	8.193	48473	9	17.925	10.130	48545	13	17.776	11.094
48258*	51	19.944	5.860	48330	10	23.658	6.885	48402	17	21.838	8.417	48474	13	18.067	10.731	48546	14	17.894	11.087
48259	12	19.981	5.170	48331	8	24.674	6.276	48403	10	22.028	8.849	48475	16	18.162	10.111	48547	10	18.026	11.221
48260	25	20.404	5.887	48332	14	24.754	6.104	48404	9	22.756	8.114	48476	13	18.449	10.280	48548	11	19.188	11.298
48261	9	20.413	5.143	48333	31	25.342	6.375	48405	11	22.796	8.574	48477	8	18.452	10.509	48549	16	19.207	11.620
48262	28	20.622	5.864	48334	13	25.524	6.032	48406	32	23.216	8.610	48478	20	18.794	10.236	48550	13	19.636	11.712



48560	8	21.448	11.465	48632	11	23.376	12.458	48704	8	24.005	13.540	48776	14	6.382	15.448	48848	13	15.318	16.384
48561	9	21.578	11.928	48633*	45	23.500	12.794	48705	17	24.079	13.785	48777	17	6.394	15.488	48849	11	15.700	16.750
48562	11	22.156	11.345	48634	13	23.530	12.400	48706	12	24.150	13.234	48778	18	8.410	15.192	48850	13	15.890	16.777
48563	9	22.404	11.520	48635	11	23.716	12.744	48707	9	24.388	13.533	48779	21	8.656	15.016	48851	14	16.496	16.810
48564	13	22.446	11.265	48636	9	23.976	12.614	48708	34	24.674	13.729	48780	8	9.525	15.794	48852	9	16.808	16.196
48565	9	22.799	11.826	48637	13	24.076	12.364	48709	15	24.688	13.715	48781	18	10.116	15.362	48853	17	16.966	16.724
48566	19	22.842	11.891	48638	22	24.182	12.736	48710	8	24.751	13.370	48782	13	10.420	15.544	48854	18	17.034	16.545
48567	12	22.886	11.063	48639	12	24.195	12.638	48711	8	24.778	13.360	48783	34	11.041	15.077	48855	13	17.367	16.973
48568	28	22.936	11.026	48640	15	24.426	12.726	48712	9	24.840	13.218	48784	28	11.298	15.374	48856	8	17.548	16.724
48569	13	22.979	11.572	48641	26	24.480	12.506	48713	12	25.219	13.590	48785	18	11.770	15.225	48857	11	18.392	16.575
48570	8	23.132	11.896	48642	32	25.057	12.112	48714	42	25.477	13.584	48786	26	13.154	15.025	48858	13	18.554	16.274
48571	11	23.998	11.387	48643	10	25.098	12.406	48715	15	25.500	13.868	48787	10	13.676	15.640	48859	9	19.076	16.102
48572	16	24.416	11.813	48644	23	25.396	12.412	48716	12	25.544	13.064	48788	14	13.811	15.166	48860	15	19.228	16.150
48573	30	24.468	11.614	48645	15	25.562	12.254	48717	17	25.626	13.565	48789	25	14.432	15.788	48861	25	19.432	16.129
48574	8	24.546	11.623	48646	25	25.856	12.095	48718	21	25.898	13.120	48790	9	16.090	15.648	48862	13	19.562	16.192
48575	12	24.646	11.092	48647*	41	3.207	13.736	48719	10	0.236	14.056	48791	21	16.696	15.338	48863	9	19.793	16.730
48576	10	24.878	11.924	48648	8	3.828	13.505	48720	11	4.445	14.641	48792	10	17.148	15.910	48864	18	19.860	16.504
48577	9	24.935	11.520	48649	9	4.505	13.292	48721	12	5.016	14.393	48793	16	17.570	15.356	48865	22	20.043	16.219
48578	10	25.153	11.526	48650	10	5.568	13.538	48722	18	6.670	14.682	48794	9	18.390	15.550	48866	10	20.072	16.218
48579	21	25.180	11.266	48651	14	5.604	13.810	48723	19	7.516	14.526	48795	10	18.746	15.678	48867	14	20.564	16.830
48580	12	25.265	11.822	48652	18	6.660	13.738	48724	12	7.663	14.460	48796	9	18.794	15.034	48868	8	20.818	16.148
48581	10	25.300	11.174	48653	11	7.864	13.108	48725	18	7.915	14.086	48797*	30	21.185	15.670	48869	9	21.055	16.482
48582	27	25.303	11.606	48654	13	7.910	13.736	48726	15	8.414	14.604	48798	13	21.302	15.774	48870	12	21.273	16.176
48583	12	25.352	11.270	48655	9	8.185	13.763	48727	12	8.809	14.584	48799	22	21.788	15.436	48871	9	22.150	16.463
48584	14	25.764	11.705	48656	19	8.746	13.444	48728	9	9.341	14.084	48800	10	21.886	15.799	48872*	40	22.739	16.328
48585	9	25.957	11.741	48657	13	9.274	13.734	48729	13	9.570	14.774	48801	20	21.950	15.337	48873	11	22.851	16.719
48586	23	25.976	11.494	48658	12	9.490	13.852	48730	15	9.611	14.418	48802	8	22.167	15.246	48874	8	23.148	16.552
48587	15	1.200	12.252	48659	9	9.650	13.316	48731	34	11.505	14.281	48803	12	22.296	15.146	48875	11	23.300	16.484
48588	17	3.688	12.865	48660	11	9.963	13.534	48732	21	12.016	14.596	48804	20	22.586	15.853	48876	17	23.418	16.312
48589*	58	3.740	12.758	48661	11	11.154	13.524	48733	16	13.145	14.174	48805	8	22.845	15.305	48877	9	23.458	16.940
48590	10	5.726	12.566	48662	10	11.388	13.036	48734*	40	14.597	14.856	48806	8	22.850	15.482	48878	11	23.694	16.695
48591	19	6.984	12.284	48663	9	11.542	13.304	48735	14	15.986	14.500	48807	20	23.111	15.749	48879	8	23.820	16.978
48592*	34	8.266	12.110	48664	25	11.569	13.546	48736	10	16.381	14.643	48808	10	23.142	15.547	48880	10	23.928	16.806
48593	60	9.558	12.635	48665	11	11.581	13.352	48737	10	16.936	14.008	48809	21	23.214	15.016	48881	19	24.351	16.452
48594	28	9.735	12.255	48666	20	12.504	13.760	48738	10	18.252	14.876	48810	30	23.236	15.144	48882	9	24.460	16.662
48595	20	9.868	12.038	48667	16	12.506	13.682	48739	8	18.746	14.932	48811	10	24.150	15.086	48883	31	24.494	16.126
48596	10	10.036	12.212	48668	9	12.775	13.368	48740	17	18.967	14.684	48812*	38	24.204	15.238	48884	13	25.081	16.780
48597	33	10.784	12.606	48669	12	13.576	13.735	48741	13	19.016	14.430	48813	10	24.246	15.218	48885	37	25.314	16.766
48598	13	11.038	12.152	48670	25	14.454	13.600	48742	17	19.150	14.628	48814	10	24.383	15.320	48886	8	25.391	16.234
48599	11	11.092	12.754	48671	9	15.905	13.728	48743	9	19.264	14.700	48815	10	24.656	15.006	48887	21	25.850	16.605
48600	15	12.150	12.818	48672	11	16.782	13.324	48744	11	19.682	14.914	48816	13	24.713	15.066	48888	20	25.934	16.754
48601	8	12.303	12.314	48673	14	17.624	13.050	48745	12	19.692	14.600	48817	13	24.804	15.724	48889	8	0.432	17.382
48602	16	12.736	12.822	48674*	42	17.728	13.422	48746	16	19.884	14.429	48818	10	24.812	15.254	48890	10	1.226	17.394
48603	8	13.246	12.882	48675*	44	18.075	13.574	48747	9	20.096	14.431	48819	15	25.231	15.085	48891	13	3.201	17.436
48604	9	13.286	12.240	48676	10	18.404	13.229	48748	11	21.596	14.714	48820	14	25.739	15.734	48892	13	3.566	17.155
48605	25	13.362	12.109	48677	10	18.426	13.908	48749	11	22.268	14.378	48821	8	25.749	15.573	48893	9	3.633	17.442
48606	8	13.683	12.560	48678	8	19.740	13.125	48750	9	22.688	14.095	48822	24	25.808	15.573	48894*	35	4.400	17.384
48607	11	13.846	12.654	48679	15	19.776	13.166	48751	12	22.795	14.499	48823	10	25.896	15.286	48895	12	5.354	17.498
48608	10	16.210	12.555	48680	18	20.036	13.716	48752	10	23.079	14.393	48824	12	0.032	16.394	48896	8	5.421	17.327
48609	9	16.234	12.221	48681	16	20.257	13.985	48753	8	23.146	14.134	48825	8	1.614	16.089	48897	24	7.034	17.098
48610	12	16.973	12.357	48682	9	20.314	13.550	48754	21	23.254	14.486	48826	19	2.836	16.732	48898	31	7.184	17.592
48611	9	18.052	12.908	48683	11	20.384	13.199	48755	14	23.260	14.746	48827	11	4.294	16.448	48899	10	7.458	17.544
48612	8	19.293	12.742	48684	11	20.406	13.384	48756	18	23.302	14.248	48828	25	5.172	16.336	48900	8	7.655	17.690
48613	10	19.304	12.526	48685	12	20.465	13.008	48757	9	23.447	14.498	48829	13	6.046	16.370	48901	9	7.678	17.726
48614	10	19.638	12.195	48686	15	21.089	13.330	48758	17	23.534	14.068	48830	22	7.114	16.723	48902	9	7.922	17.259
48615	18	20.116	12.904	48687	14	21.200	13.038	48759	40	23.694	14.277	48831	10	7.729	16.752	48903	16	8.133	17.369
48616	9	20.246	12.178	48688	8	21.246	13.387	48760	12	23.754	14.650	48832	11	8.306	16.316	48904	10	8.877	17.453
48617	19	20.318	12.162	48689	27	21.775	13.345	48761	11	23.908	14.164	48833	10	8.512	16.316	48905	30	9.181	17.434
48618	16	20.416	12.019	48690	10	22.308	13.528	48762	11	23.959	14.882	48834	8	8.584	16.454	48906	14	9.664	17.144
48619	8	20.924	12.346	48691	8	22.487	13.672	48763	9	23.962	14.361	48835	9	10.528	16.949	48907*	55	11.765	17.088
48620	11	21.060	12.810	48692	9	22.507	13.646	48764	35	24.064	14.897	48836	9	10.946	16.738	48908	10	13.296	17.444
48621	10	21.206	12.906	48693	15	22.709	13.920	48765	11	24.858	14.514	48837	14	11.076	16.974	48909	8		



48920	9	17.320	17.702	48992	9	14.894	19.221	49064	30	22.350	21.759	49136	14	5.280	24.110
48921	10	17.427	17.210	48993	12	15.170	19.390	49065	14	23.798	21.236	49137	9	6.876	24.888
48922	11	17.713	17.216	48994	20	15.590	19.537	49066	12	23.896	21.086	49138	24	10.059	24.834
48923	8	18.115	17.300	48995	13	15.659	19.014	49067	18	24.148	21.148	49139	9	10.512	24.426
48924*	62	19.034	17.972	48996	36	15.684	19.529	49068	12	25.016	21.416	49140	18	10.927	24.736
48925	9	19.072	17.368	48997	10	16.784	19.982	49069	20	25.770	21.293	49141	10	11.206	24.676
48926	8	19.348	17.730	48998	11	18.208	19.334	49070	9	1.426	22.356	49142	10	11.952	24.861
48927	9	19.965	17.727	48999	16	18.954	19.808	49071	20	1.762	22.957	49143	15	12.602	24.214
48928*	24	20.226	17.731	49000	15	19.186	19.094	49072	17	2.482	22.743	49144	10	12.942	24.357
48929	10	20.558	17.802	49001	12	20.349	19.282	49073	16	4.196	22.503	49145	10	15.512	24.832
48930	10	20.925	17.047	49002	13	20.933	19.238	49074	23	5.209	22.820	49146	8	16.374	24.098
48931	8	21.156	17.813	49003	8	20.944	19.232	49075	16	5.324	22.532	49147	8	16.394	24.896
48932	9	21.350	17.284	49004	11	21.260	19.386	49076	10	5.792	22.910	49148	10	17.210	24.015
48933	8	21.451	17.966	49005	8	23.863	19.336	49077	12	6.554	22.340	49149	16	19.038	24.797
48934*	26	22.157	17.342	49006	16	23.987	19.002	49078	14	7.009	22.476	49150	15	20.474	24.844
48935	12	22.194	17.632	49007	9	24.476	19.192	49079	8	7.484	22.354	49151	10	21.315	24.966
48936	21	23.692	17.193	49008	13	24.928	19.512	49080	11	12.485	22.120	49152	11	21.318	24.858
48937	10	24.446	17.698	49009	13	25.116	19.069	49081	8	12.627	22.918	49153	10	22.065	24.830
48938	24	24.654	17.401	49010	12	25.576	19.484	49082	8	12.644	22.592	49154	12	22.670	24.834
48939	17	25.237	17.540	49011	8	25.654	19.492	49083	20	14.196	22.492	49155	19	23.648	24.556
48940	9	25.466	17.540	49012	11	25.676	19.652	49084	10	15.900	22.912	49156	10	24.491	24.175
48941	26	25.558	17.700	49013	10	0.426	20.306	49085*	80	16.279	22.750	49157	20	24.981	24.786
48942	8	25.650	17.288	49014	13	2.575	20.869	49086	13	16.406	22.256	49158	12	25.485	24.006
48943	11	25.709	17.408	49015	12	2.577	20.848	49087	14	17.906	22.755	49159	10	0.122	25.693
48944	10	25.742	17.707	49016	10	4.170	20.660	49088	14	18.024	22.842	49160	10	4.776	25.632
48945	23	25.798	17.206	49017	13	4.279	20.559	49089	8	18.112	22.524	49161	10	4.812	25.636
48946	11	0.227	18.685	49018	23	4.915	20.686	49090	9	18.133	22.074	49162	9	5.175	25.476
48947*	41	1.604	18.359	49019	9	6.062	20.659	49091	13	18.782	22.966	49163	8	6.040	25.327
48948	14	3.513	18.756	49020	9	7.269	20.112	49092	10	19.526	22.346	49164	16	6.196	25.843
48949	11	4.123	18.616	49021	20	8.458	20.953	49093	10	21.074	22.251	49165	13	8.384	25.496
48950	9	9.637	18.042	49022	13	10.064	20.353	49094	22	22.102	22.305	49166	45	9.262	25.634
48951	17	10.864	18.236	49023	20	10.114	20.014	49095	10	22.420	22.184	49167*	40	11.212	25.016
48952	17	12.627	18.302	49024	28	12.302	20.255	49096	10	22.800	22.535	49168	13	12.166	25.870
48953	12	13.041	18.593	49025	14	13.198	20.964	49097	35	23.138	22.512	49169	22	12.268	25.174
48954	8	13.396	18.131	49026	10	13.552	20.817	49098	13	23.195	22.559	49170	11	12.496	25.635
48955	9	13.923	18.332	49027	12	13.778	20.016	49099	12	23.750	22.461	49171	10	12.727	25.764
48956	14	14.607	18.097	49028	8	14.468	20.105	49100	9	24.028	22.464	49172	8	12.886	25.801
48957	10	14.624	18.634	49029	27	16.340	20.915	49101	11	24.470	22.313	49173	22	14.426	25.099
48958*	28	16.488	18.036	49030	11	17.328	20.058	49102	13	24.816	22.620	49174	9	16.922	25.106
48959	16	17.122	18.860	49031	12	18.024	20.376	49103	20	24.988	22.196	49175	20	17.224	25.492
48960	12	17.286	18.668	49032	13	19.386	20.848	49104	13	3.284	23.272	49176	17	17.386	25.784
48961	24	19.126	18.184	49033	9	19.948	20.283	49105	20	6.392	23.824	49177	14	17.808	25.845
48962	12	19.172	18.876	49034	21	20.639	20.630	49106	11	7.932	23.816	49178	10	18.123	25.904
48963	24	19.356	18.495	49035	10	20.745	20.546	49107*	38	8.526	23.984	49179	13	19.502	25.549
48964	15	19.474	18.476	49036	15	20.775	20.402	49108*	45	8.590	23.082	49180	10	19.762	25.002
48965	17	20.478	18.046	49037	20	21.579	20.745	49109*	46	10.310	23.152	49181	10	20.322	25.184
48966	24	20.648	18.126	49038	17	23.318	20.286	49110	17	10.346	23.674	49182	9	21.624	25.540
48967	20	20.974	18.942	49039	20	24.252	20.474	49111	40	10.460	23.012	49183	20	23.036	25.668
48968	24	22.140	18.502	49040	20	25.229	20.554	49112*	35	10.518	23.322	49184	21	25.546	25.018
48969	11	22.317	18.062	49041	13	25.248	20.306	49113	16	14.036	23.966	49185	8	25.594	25.234
48970	14	22.350	18.655	49042*	64	0.610	21.792	49114	8	15.848	23.091	49186	12	25.752	25.038
48971	10	22.464	18.384	49043	8	1.065	21.175	49115	15	15.950	23.584				
48972	9	23.362	18.767	49044	8	1.341	21.702	49116	33	16.214	23.616				
48973	16	23.630	18.863	49045*	41	1.645	21.256	49117	18	16.357	23.974				
48974	12	24.178	18.006	49046	9	6.148	21.614	49118	21	16.838	23.549				
48975	13	24.399	18.520	49047	12	8.549	21.075	49119	11	17.082	23.135				
48976	11	24.860	18.544	49048*	40	10.824	21.372	49120	13	18.315	23.898				
48977	16	24.924	18.874	49049	19	11.323	21.990	49121	12	18.414	23.225				
48978	21	25.288	18.708	49050	11	14.540	21.376	49122	9	20.554	23.482				
48979	12	0.007	19.383	49051	17	14.989	21.549	49123	11	22.626	23.322				
48980	18	1.021	19.434	49052	9	16.240	21.572	49124	12	22.910	23.702				
48981*	41	2.656	19.474	49053	10	16.240	21.814	49125	15	23.476	23.744				
48982	9	3.786	19.920	49054	15	16.621	21.813	49126	18	24.176	23.724				
48983	11	5.184	19.135	49055	11	16.754	21.510	49127	12	24.500	23.622				
48984	8	5.424	19.741	49056	22	17.583	21.689	49128	21	0.230	24.535				
48985	8	6.390	19.594	49057	28	17.908	21.376	49129	9	0.458	24.278				
48986	9	7.127	19.222	49058	13	19.305	21.398	49130*	20	0.890	24.294				
48987	14	7.496	19.177	49059	11	19.812	21.792	49131	8	1.514	24.096				
48988	10	8.295	19.320	49060*	42	20.928	21.630	49132*	42	1.799	24.116				
48989	12	8.428	19.992	49061	13	21.114	21.765	49133	27	2.277	24.036				
48990	14	9.307	19.940	49062	10	21.903	21.658	49134	15	2.845	24.307				
48991	10	9.685	19.266	49063	8	22.269	21.414	49135	21	3.546	24.047				

R.A. 18<sup>h</sup> 12<sup>m</sup>

Plate 1068; 1917 May 28.

Provisional Constants.

A B C  
 -0.2553 +0.0351 -0.522

D E F  
 -0.0349 -0.2570 +0.192

Mag. = 16.5 - 1.09√d

No.	d	x	y
49201	8	0.255	0.026
49202	8	0.532	0.096
49203	23	1.172	0.342
49204	27	1.600	0.293
49205*	34	3.090	0.778
49206	18	3.469	0.829
49207	32	3.656	0.250
49208	26	4.116	0.766
49209	10	4.117	0.318
49210	19	7.378	0.465
49211	9	7.390	0.743
49212	17	7.958	0.696
49213	25	7.986	0.264
49214	24	8.345	0.430
49215	10	8.420	0.457
49216	12	8.682	0.612
49217	26	8.808	0.556
49218	8	9.126	0.634
49219	37	9.264	0.078
49220	18	9.308	0.773
49221	25	9.396	0.442



49256	27	23.665	0.432	49328	10	13.326	2.282	49400	23	13.740	3.135	49472	10	13.236	4.588	49544	14	12.116	5.758
49257	22	23.718	0.194	49329	10	13.361	2.671	49401	11	13.743	3.913	49473	11	13.391	4.450	49545	28	12.331	5.894
49258	11	25.544	0.046	49330	10	13.670	2.930	49402	12	14.015	3.563	49474	14	13.728	4.994	49546	21	12.400	5.661
49259	16	1.037	1.166	49331	13	14.496	2.626	49403	8	14.082	3.451	49475	8	13.950	4.440	49547	32	12.834	5.730
49260	10	1.095	1.760	49332	16	14.844	2.857	49404	28	14.130	3.124	49476	8	14.364	4.551	49548	14	13.596	5.406
49261	34	1.872	1.602	49333	10	14.920	2.174	49405	9	14.144	3.514	49477	11	14.900	4.416	49549	22	13.748	5.130
49262	24	4.970	1.577	49334	19	14.940	2.487	49406	10	14.629	3.792	49478	31	15.065	4.506	49550	11	13.801	5.218
49263	12	5.298	1.874	49335	8	15.129	2.325	49407	10	14.712	3.874	49479*	41	15.210	4.810	49551	26	14.100	5.730
49264	18	5.898	1.567	49336	25	15.138	2.246	49408	10	14.749	3.138	49480	29	15.454	4.383	49552	29	14.236	5.186
49265	26	5.976	1.328	49337	40	15.376	2.939	49409*	60	15.216	3.407	49481	21	15.578	4.890	49553	35	14.528	5.206
49266	22	6.407	1.668	49338	12	15.482	2.081	49410	13	15.938	3.346	49482	28	15.649	4.250	49554	17	14.706	5.615
49267	19	6.650	1.470	49339	9	15.639	2.682	49411	21	15.992	3.247	49483	10	15.841	4.211	49555	17	15.444	5.170
49268	30	7.286	1.794	49340	25	16.302	2.020	49412	10	16.448	3.234	49484	19	15.858	4.468	49556	10	15.521	5.200
49269	11	7.836	1.636	49341	26	16.556	2.730	49413	13	16.485	3.168	49485	15	15.883	4.706	49557	29	16.214	5.524
49270	11	7.839	1.866	49342	36	16.564	2.833	49414	30	16.682	3.039	49486	22	16.408	4.720	49558	33	16.630	5.289
49271	8	7.910	1.279	49343	9	16.676	2.537	49415	8	16.882	3.832	49487	8	16.476	4.646	49559	15	17.582	5.489
49272	12	10.622	1.122	49344	12	16.782	2.484	49416*	44	17.076	3.975	49488	10	16.478	4.660	49560	10	17.620	5.745
49273	18	11.841	1.504	49345	30	16.855	2.968	49417	18	17.142	3.726	49489	9	16.671	4.284	49561	13	17.882	5.232
49274	14	11.974	1.696	49346	13	17.056	2.552	49418	35	17.568	3.584	49490	10	16.736	4.112	49562	32	18.596	5.722
49275	16	12.510	1.526	49347	35	17.698	2.132	49419	28	17.626	3.567	49491	10	16.938	4.564	49563	25	18.632	5.524
49276	27	12.751	1.155	49348	17	17.972	2.289	49420	9	17.695	3.661	49492	11	17.018	4.922	49564	14	18.640	5.686
49277	23	12.826	1.288	49349	26	18.290	2.253	49421	19	17.722	3.033	49493	10	17.326	4.518	49565	17	18.868	5.936
49278	26	13.063	1.738	49350	10	18.844	2.591	49422	9	17.736	3.549	49494	10	17.964	4.348	49566	8	18.904	5.556
49279	11	13.223	1.008	49351	19	18.866	2.006	49423	41	17.806	3.320	49495	10	18.063	4.698	49567	27	18.954	5.520
49280	26	14.474	1.694	49352	10	19.165	2.770	49424	9	17.893	3.112	49496	8	18.274	4.258	49568	9	19.319	5.224
49281	32	15.174	1.484	49353	26	19.224	2.613	49425	10	17.894	3.844	49497	21	18.521	4.326	49569	9	19.343	5.552
49282	32	15.416	1.353	49354	8	19.296	2.394	49426	8	18.182	3.914	49498	10	18.659	4.016	49570	10	19.685	5.364
49283	9	15.676	1.502	49355	9	20.013	2.451	49427	20	18.292	3.456	49499	9	19.202	4.894	49571	27	19.774	5.216
49284	8	15.950	1.618	49356	15	20.403	2.543	49428	9	19.606	3.790	49500	23	19.434	4.834	49572	25	20.226	5.013
49285	13	16.112	1.180	49357	10	20.771	2.382	49429	31	19.855	3.876	49501	32	19.508	4.994	49573	14	20.674	5.716
49286	22	16.247	1.145	49358	14	21.402	2.260	49430	21	20.068	3.014	49502	23	20.794	4.722	49574	12	21.271	5.427
49287	9	16.442	1.096	49359	37	21.671	2.390	49431	26	20.073	3.895	49503	25	21.459	4.410	49575	10	21.911	5.646
49288	17	16.603	1.708	49360	28	21.718	2.045	49432	31	20.400	3.601	49504	32	21.668	4.029	49576	11	21.934	5.322
49289	25	16.800	1.174	49361	10	22.618	2.766	49433	16	20.636	3.945	49505	12	21.771	4.854	49577	28	22.048	5.688
49290	9	17.554	1.916	49362	9	22.776	2.758	49434	11	21.354	3.896	49506	15	22.777	4.319	49578	10	22.154	5.482
49291	25	17.592	1.040	49363	8	22.780	2.263	49435	10	21.799	3.132	49507	10	22.873	4.552	49579	14	22.247	5.913
49292	23	18.584	1.500	49364	26	23.434	2.006	49436	38	23.146	3.222	49508	35	23.246	4.729	49580	20	22.379	5.674
49293	21	18.959	1.004	49365	11	23.925	2.128	49437	13	23.300	3.470	49509	31	23.438	4.891	49581	14	23.072	5.794
49294	17	19.550	1.502	49366	20	24.240	2.208	49438	23	23.712	3.289	49510	8	23.578	4.466	49582	12	23.342	5.947
49295	19	20.616	1.910	49367	12	25.836	2.011	49439	9	24.680	3.210	49511	9	24.510	4.271	49583	19	23.783	5.898
49296	10	20.993	1.636	49368	9	0.021	3.864	49440	11	1.034	4.088	49512	10	0.140	5.874	49584	19	24.296	5.706
49297	8	21.538	1.492	49369	25	0.278	3.069	49441	9	1.410	4.984	49513	10	0.214	5.136	49585	10	25.088	5.862
49298	31	21.829	1.194	49370	32	0.394	3.309	49442	12	2.916	4.184	49514	12	0.300	5.984	49586	30	25.854	5.247
49299	33	22.089	1.532	49371	13	0.708	3.396	49443*	39	3.200	4.534	49515	9	0.322	5.500	49587	8	0.045	6.592
49300	12	23.059	1.450	49372	12	0.922	3.391	49444	20	4.236	4.090	49516	8	0.532	5.668	49588	35	0.746	6.404
49301	23	0.326	2.384	49373	9	1.371	3.291	49445	11	4.616	4.352	49517	9	0.812	5.943	49589	32	0.922	6.766
49302	27	1.032	2.725	49374	11	1.805	3.856	49446	12	4.801	4.294	49518	26	0.900	5.117	49590	11	1.308	6.814
49303	19	1.395	2.313	49375	14	1.964	3.335	49447	19	6.304	4.036	49519*	56	0.948	5.870	49591	29	1.516	6.832
49304	22	1.498	2.278	49376	10	2.212	3.193	49448	14	7.066	4.490	49520	10	1.735	5.596	49592	9	1.545	6.532
49305	30	2.671	2.106	49377	18	2.296	3.212	49449*	55	7.285	4.162	49521	22	2.914	5.418	49593	17	2.755	6.214
49306	10	3.028	2.215	49378	12	2.342	3.240	49450	8	7.458	4.222	49522	23	3.382	5.446	49594	28	3.301	6.024
49307	21	3.537	2.854	49379*	54	3.105	3.095	49451	26	7.926	4.154	49523	20	4.304	5.330	49595	34	3.344	6.482
49308	13	3.715	2.667	49380	12	3.562	3.883	49452	8	8.003	4.875	49524	10	4.426	5.610	49596	10	3.525	6.138
49309	16	3.733	2.377	49381	9	3.947	3.035	49453	12	8.070	4.903	49525	15	4.802	5.146	49597	10	3.582	6.566
49310	10	4.354	2.304	49382	12	4.006	3.902	49454	25	8.136	4.018	49526	17	5.546	5.765	49598	20	3.764	6.827
49311	9	4.476	2.553	49383	9	4.528	3.617	49455	10	9.000	4.865	49527*	43	5.975	5.516	49599	13	3.770	6.668
49312	29	4.768	2.295	49384*	26	7.008	3.589	49456	10	9.084	4.994	49528	9	6.101	5.898	49600	10	3.816	6.068
49313	29	5.392	2.721	49385	29	8.214	3.183	49457	8	9.179	4.820	49529	15	6.644	5.265	49601	25	4.365	6.918
49314	10	5.670	2.075	49386	10	9.096	3.610	49458	23	9.398	4.266	49530	8	6.728	5.630	49602	12	4.857	6.758
49315	14	6.376	2.455	49387	11	10.328	3.962	49459	14	9.672	4.087	49531	19	7.142	5.288	49603	13	4.904	6.944
49316	20	7.482	2.825	49388	10	10.964	3.593	49460	10	10.234	4.394	49532	14	7.982	5.272	49604	8	5.230	6.723
49317	19	8.410	2.045	49389	11	11.427	3.577	49461	32	10.892	4.684	49533	13	8.994	5.201	49605	11	6.642	6.630
49318	9	10.556	2.083	49390	11	11.615	3.983	49462	15	11.048	4.726	49534	21	9.214	5.704	49606	12	6.822	6.948
49319	9	10.936	2.096	49391	10	11.782	3.801	49463	10	11.071	4.01								



49616	33	9.578	6.188	49688	11	7.635	7.442	49760	25	6.290	8.746	49832	12	8.060	9.188	49904	10	10.478	10.739
49617	13	9.766	6.804	49689	19	8.170	7.286	49761	12	6.314	8.181	49833	32	8.208	9.983	49905	16	10.784	10.910
49618	11	10.374	6.375	49690	31	8.263	7.246	49762	10	6.331	8.965	49834	18	8.804	9.576	49906	39	10.804	10.996
49619	10	10.457	6.474	49691	9	8.326	7.542	49763	16	6.362	8.170	49835	10	8.866	9.208	49907	14	10.829	10.773
49620	10	10.485	6.322	49692	8	8.556	7.312	49764	28	7.172	8.924	49836	17	9.154	9.890	49908	27	10.874	10.346
49621	12	10.486	6.342	49693	10	8.985	7.770	49765	8	7.270	8.094	49837	19	9.422	9.162	49909	10	10.875	10.595
49622	33	10.621	6.400	49694	9	9.038	7.102	49766	12	7.335	8.962	49838	42	9.835	9.300	49910	10	11.125	10.161
49623	35	10.874	6.878	49695	27	9.097	7.881	49767	10	7.778	8.570	49839	10	10.025	9.339	49911	16	11.330	10.815
49624	12	11.154	6.582	49696*	36	9.744	7.798	49768	15	8.083	8.598	49840	24	10.390	9.746	49912	19	12.286	10.441
49625	9	11.236	6.749	49697	10	10.054	7.648	49769	13	8.668	8.236	49841	10	10.438	9.436	49913	90	12.582	10.714
49626	31	11.376	6.476	49698	21	10.346	7.933	49770	33	8.684	8.943	49842	10	10.549	9.518	49914	41	12.620	10.547
49627*	84	11.566	6.786	49699	22	10.396	7.394	49771	8	8.855	8.792	49843	17	10.670	9.800	49915	10	12.848	10.246
49628	10	11.656	6.138	49700	26	10.531	7.700	49772	23	8.910	8.286	49844	25	10.936	9.557	49916	13	13.078	10.538
49629	19	12.611	6.164	49701	12	10.574	7.380	49773	23	9.012	8.772	49845	30	11.843	9.651	49917	10	13.129	10.366
49630	10	12.866	6.664	49702	10	10.640	7.954	49774	8	9.256	8.963	49846	10	12.054	9.067	49918*	36	13.147	10.300
49631	9	13.144	6.270	49703	8	10.690	7.985	49775	8	9.306	8.753	49847	28	12.392	9.014	49919	8	13.314	10.011
49632	19	13.206	6.934	49704	10	10.728	7.837	49776	23	10.449	8.354	49848*	53	12.926	9.594	49920	16	14.582	10.994
49633	20	13.317	6.419	49705	13	10.858	7.100	49777	9	10.816	8.470	49849	13	12.940	9.799	49921	10	14.636	10.684
49634	23	13.708	6.876	49706	8	11.048	7.696	49778	27	11.350	8.794	49850	21	16.688	9.506	49922	18	15.266	10.624
49635	30	13.768	6.643	49707	8	11.135	7.058	49779	9	11.600	8.518	49851	32	17.539	9.785	49923	11	16.806	10.958
49636*	40	14.070	6.950	49708	21	11.352	7.026	49780	11	12.828	8.702	49852	27	18.210	9.726	49924	13	17.588	10.017
49637	10	14.676	6.374	49709	12	11.641	7.535	49781	33	13.190	8.630	49853	33	19.014	9.250	49925	16	18.748	10.034
49638	10	15.519	6.318	49710	16	11.716	7.548	49782	23	13.796	8.758	49854	10	20.493	9.512	49926	22	18.874	10.725
49639	25	15.670	6.816	49711	11	11.802	7.736	49783	10	13.824	8.803	49855	17	21.404	9.786	49927	26	19.846	10.563
49640	12	15.848	6.178	49712	10	11.865	7.532	49784	13	14.766	8.233	49856	23	24.124	9.750	49928	9	21.262	10.340
49641	15	15.877	6.446	49713	9	11.887	7.188	49785*	78	15.005	8.640	49857	9	25.797	9.808	49929	8	23.148	10.756
49642	11	16.062	6.781	49714	18	12.162	7.986	49786*	53	15.050	8.607	49858	10	0.126	10.792	49930	10	24.216	10.084
49643	12	16.089	6.750	49715	11	12.236	7.802	49787	21	15.676	8.816	49859	8	0.288	10.420	49931	17	24.268	10.012
49644	25	16.369	6.190	49716	9	12.990	7.836	49788	11	16.324	8.502	49860	8	0.372	10.196	49932	15	24.850	10.532
49645	14	16.537	6.239	49717	9	13.009	7.878	49789	8	17.167	8.288	49861	23	0.376	10.799	49933	10	0.169	11.460
49646	22	16.707	6.843	49718	12	13.358	7.242	49790	12	17.171	8.872	49862	11	0.393	10.430	49934	8	0.418	11.638
49647	10	16.958	6.080	49719	20	13.767	7.232	49791	27	17.204	8.359	49863	21	0.586	10.718	49935	11	0.458	11.378
49648	22	17.537	6.722	49720	11	14.897	7.111	49792	24	17.886	8.105	49864*	35	0.852	10.606	49936	8	0.826	11.796
49649	34	17.826	6.330	49721*	53	15.800	7.352	49793	19	18.714	8.578	49865	32	1.248	10.833	49937	26	0.950	11.140
49650*	32	17.914	6.850	49722	10	16.592	7.004	49794	9	19.292	8.221	49866	46	1.284	10.808	49938	10	0.996	11.685
49651	26	18.102	6.872	49723	35	17.966	7.459	49795*	43	19.375	8.356	49867	38	1.306	10.822	49939	30	1.018	11.000
49652	10	18.106	6.584	49724	12	18.184	7.486	49796	9	19.796	8.516	49868	60	1.605	10.273	49940	10	2.012	11.500
49653	15	18.604	6.560	49725	8	18.262	7.542	49797	10	19.832	8.694	49869*	29	1.943	10.274	49941	16	2.434	11.923
49654	23	18.665	6.639	49726	8	18.493	7.269	49798	26	20.276	8.028	49870	16	2.346	10.565	49942	35	2.483	11.724
49655	13	19.367	6.415	49727	13	19.635	7.198	49799	12	20.594	8.538	49871	13	3.228	10.564	49943	12	2.660	11.201
49656	9	19.465	6.538	49728	10	19.764	7.350	49800	22	21.371	8.521	49872	10	3.334	10.381	49944	10	2.694	11.022
49657	10	19.569	6.853	49729	9	21.896	7.130	49801	37	21.421	8.600	49873	13	3.386	10.384	49945	10	2.950	11.627
49658	10	19.584	6.557	49730	21	22.496	7.002	49802	12	22.028	8.827	49874	26	3.431	10.584	49946	9	3.166	11.635
49659	32	19.901	6.892	49731	34	22.671	7.746	49803	10	0.575	9.911	49875	10	3.894	10.368	49947	16	3.196	11.377
49660	12	20.634	6.456	49732	10	22.876	7.012	49804	9	0.736	9.598	49876	30	3.930	10.416	49948	11	3.281	11.930
49661	26	20.999	6.128	49733*	41	23.225	7.544	49805	18	0.747	9.726	49877	18	3.953	10.729	49949	32	3.318	11.716
49662	10	21.204	6.028	49734	12	23.957	7.702	49806	32	2.265	9.906	49878*	35	3.976	10.496	49950	9	3.368	11.378
49663	10	21.486	6.872	49735	12	25.248	7.120	49807	15	3.378	9.304	49879	10	4.126	10.702	49951	12	3.782	11.810
49664	16	21.599	6.786	49736	12	25.505	7.380	49808	12	3.722	9.046	49880	11	4.336	10.134	49952	8	3.976	11.845
49665	21	22.638	6.361	49737	14	25.570	7.596	49809	10	3.725	9.416	49881	10	4.394	10.731	49953	27	3.992	11.600
49666*	36	22.912	6.482	49738	9	0.760	8.225	49810	19	3.836	9.499	49882	11	4.590	10.686	49954	9	5.706	11.424
49667	10	23.600	6.309	49739	32	1.224	8.722	49811	20	3.954	9.196	49883	8	4.630	10.807	49955	8	5.890	11.008
49668	13	24.280	6.773	49740	9	1.651	8.822	49812	10	4.462	9.720	49884	9	4.659	10.323	49956	11	6.486	11.046
49669	11	25.610	6.570	49741	35	1.852	8.401	49813	23	4.555	9.474	49885	24	4.966	10.521	49957	12	7.586	11.664
49670	9	0.184	7.396	49742	12	2.074	8.946	49814	8	4.736	9.740	49886	8	4.970	10.234	49958	10	7.604	11.549
49671	10	0.583	7.926	49743	15	2.512	8.709	49815	18	5.036	9.207	49887	20	5.386	10.884	49959	8	7.948	11.450
49672	10	0.665	7.128	49744	11	2.735	8.304	49816	28	5.132	9.065	49888	15	5.498	10.782	49960	9	8.023	11.875
49673	11	0.844	7.203	49745	10	2.738	8.619	49817	22	5.282	9.913	49889	10	5.846	10.664	49961	20	8.237	11.041
49674	28	1.281	7.245	49746	10	4.454	8.674	49818	16	5.614	9.124	49890	18	6.145	10.058	49962	31	9.250	11.838
49675	16	1.722	7.544	49747	21	4.479	8.806	49819	10	5.746	9.594	49891	8	6.472	10.724	49963	29	9.471	11.676
49676*	63	4.718	7.759	49748	8	4.626	8.798	49820	9	5.806	9.386	49892	12	6.878	10.196	49964	13	9.517	11.316
49677	11	5.094	7.052	49749	19	4.734	8.376	49821	32	5.816	9.625	49893	10	7.040	10.356	49965	11	9.682	11.762
49678	19	5.289	7.840	49750	29	5.053	8.164	49822	10	5.916	9.656	49894	28	7.065	10.454	49966	15	9.907	11.226
49679	12	5.311	7.088	4975															



49976	9	17.490	11.830	50048	24	17.555	12.750	50120	15	22.037	13.030	50192	10	2.831	15.832	50264	12	17.105	16.038
49977	20	17.776	11.656	50049	28	18.354	12.386	50121	9	22.513	13.051	50193	12	3.258	15.192	50265	15	18.040	16.676
49978	11	19.466	11.237	50050	10	19.039	12.886	50122	29	22.726	13.459	50194	12	3.768	15.838	50266	10	20.344	16.278
49979	14	19.776	11.902	50051	8	21.253	12.876	50123	10	0.292	14.496	50195	8	3.775	15.680	50267	10	20.865	16.957
49980	10	20.123	11.420	50052	33	21.506	12.834	50124	18	0.732	14.034	50196	29	3.834	15.676	50268	13	20.952	16.155
49981	32	22.274	11.055	50053	18	21.873	12.526	50125	10	0.820	14.612	50197	10	3.922	15.390	50269	31	20.970	16.470
49982*	80	22.354	11.524	50054	10	22.503	12.626	50126	9	1.101	14.504	50198	31	4.096	15.957	50270*	46	22.416	16.337
49983	19	22.640	11.654	50055	24	23.280	12.776	50127	9	1.167	14.246	50199*	42	4.356	15.706	50271	11	23.133	16.368
49984	30	24.140	11.354	50056	18	23.724	12.876	50128	26	1.276	14.598	50200	13	4.514	15.962	50272	10	23.792	16.412
49985	20	0.563	12.502	50057	22	24.799	12.352	50129	12	1.285	14.858	50201*	42	4.726	15.466	50273	10	23.820	16.083
49986	11	0.860	12.004	50058	11	24.800	12.382	50130	22	1.325	14.362	50202	10	4.994	15.716	50274	10	23.922	16.554
49987	9	1.094	12.286	50059	11	0.072	13.056	50131	9	1.474	14.612	50203	20	5.508	15.506	50275	17	24.458	16.666
49988*	42	1.516	12.906	50060	10	0.515	13.790	50132	17	1.556	14.181	50204	13	5.764	15.644	50276	14	24.986	16.135
49989	13	1.550	12.510	50061	28	1.150	13.560	50133	37	1.715	14.388	50205	13	6.178	15.748	50277	10	25.793	16.518
49990	12	1.735	12.856	50062	10	1.228	13.922	50134	10	1.780	14.760	50206	35	6.388	15.396	50278	34	0.188	17.454
49991	9	2.094	12.473	50063	10	1.262	13.920	50135	9	1.987	14.474	50207	21	7.097	15.738	50279	8	1.665	17.569
49992	29	2.200	12.848	50064	11	1.305	13.082	50136	9	2.404	14.680	50208	10	7.662	15.789	50280	24	1.724	17.304
49993	10	2.215	12.750	50065	9	1.381	13.766	50137	17	2.976	14.643	50209	10	7.703	15.424	50281	9	2.315	17.798
49994	12	2.446	12.836	50066	10	1.586	13.166	50138	10	3.579	14.904	50210	10	7.839	15.064	50282	28	2.685	17.510
49995	27	2.498	12.615	50067	29	1.644	13.692	50139	20	3.796	14.780	50211	12	7.866	15.496	50283	18	3.268	17.646
49996	11	2.896	12.034	50068	12	1.814	13.842	50140	11	4.124	14.606	50212	33	8.218	15.607	50284	8	3.500	17.649
49997*	36	3.074	12.220	50069	19	1.829	13.877	50141	9	4.411	14.188	50213	10	8.716	15.464	50285	31	3.588	17.806
49998	9	3.115	12.514	50070	13	1.954	13.122	50142	11	5.005	14.488	50214	22	8.757	15.178	50286	10	3.684	17.396
49999	27	3.414	12.518	50071	34	1.972	13.252	50143	17	5.108	14.718	50215	12	8.872	15.583	50287	12	3.742	17.514
50000	14	3.580	12.360	50072	13	2.102	13.898	50144	17	5.200	14.148	50216	15	9.114	15.340	50288	10	3.774	17.812
50001	8	3.850	12.347	50073	10	2.142	13.204	50145	34	5.294	14.422	50217	28	11.324	15.342	50289	29	3.830	17.310
50002	24	3.873	12.200	50074	39	2.696	13.838	50146	10	5.560	14.085	50218	29	11.344	15.204	50290	10	4.874	17.854
50003	10	4.277	12.652	50075	13	2.712	13.824	50147	15	6.150	14.502	50219	10	13.338	15.023	50291	11	5.207	17.636
50004	30	4.309	12.146	50076	10	2.861	13.327	50148	10	6.797	14.166	50220	10	13.974	15.638	50292	17	6.644	17.156
50005	33	4.366	12.927	50077	14	3.242	13.700	50149	10	7.144	14.708	50221	17	14.277	15.503	50293	10	7.410	17.558
50006	20	4.444	12.396	50078*	54	3.496	13.691	50150	10	7.409	14.716	50222	10	14.902	15.531	50294	31	7.885	17.131
50007	9	4.661	12.298	50079	21	3.523	13.976	50151	19	7.599	14.100	50223	24	16.632	15.062	50295	20	7.992	17.257
50008	58	4.690	12.378	50080	17	3.564	13.170	50152	10	8.008	14.618	50224	11	17.380	15.520	50296	11	8.316	17.541
50009	8	5.161	12.852	50081	21	3.650	13.672	50153	27	9.131	14.161	50225	8	18.347	15.634	50297	10	9.128	17.632
50010	10	5.286	12.854	50082	27	3.917	13.226	50154	15	9.284	14.192	50226	8	18.448	15.181	50298	33	9.174	17.151
50011*	80	5.450	12.952	50083	14	4.173	13.704	50155	11	9.452	14.602	50227	20	19.650	15.369	50299	10	9.386	17.946
50012	13	5.517	12.924	50084	10	4.479	13.882	50156	22	11.134	14.292	50228	30	20.259	15.708	50300	38	9.818	17.018
50013	12	5.554	12.946	50085	9	4.501	13.830	50157	33	11.343	14.072	50229	9	20.750	15.574	50301	11	10.401	17.446
50014	24	5.902	12.934	50086	10	4.614	13.474	50158	11	11.561	14.313	50230	20	21.038	15.566	50302	13	14.289	17.400
50015	36	5.969	12.163	50087	13	4.662	13.746	50159	12	11.950	14.098	50231	14	21.543	15.629	50303	16	15.314	17.764
50016	8	6.280	12.248	50088	14	4.686	13.022	50160	11	12.920	14.548	50232	29	22.906	15.026	50304	15	16.492	17.736
50017	34	6.445	12.558	50089	11	4.810	13.191	50161*	36	13.058	14.485	50233	11	23.035	15.914	50305	18	17.638	17.635
50018	34	6.566	12.286	50090	8	5.375	13.546	50162	34	14.198	14.420	50234	11	23.220	15.424	50306	16	20.994	17.562
50019	57	6.766	12.496	50091	34	5.415	13.136	50163	29	14.740	14.296	50235*	41	0.765	16.444	50307	9	21.479	17.582
50020*	47	6.818	12.004	50092	27	5.456	13.201	50164	15	15.457	14.004	50236	10	0.880	16.832	50308	27	23.343	17.605
50021	18	6.884	12.739	50093	10	5.458	13.106	50165	27	16.386	14.670	50237	16	1.447	16.424	50309	13	23.400	17.292
50022	26	7.117	12.575	50094	9	5.592	13.786	50166	8	16.626	14.796	50238	10	1.724	16.806	50310	26	24.542	17.214
50023	8	7.240	12.836	50095	18	6.272	13.516	50167	10	17.191	14.687	50239	20	2.382	16.563	50311	10	24.614	17.056
50024	32	7.249	12.064	50096	9	6.331	13.064	50168	11	17.250	14.578	50240	34	2.521	16.236	50312	8	25.235	17.470
50025	30	7.365	12.238	50097	12	6.388	13.564	50169	27	18.054	14.215	50241	15	3.113	16.886	50313	25	0.174	18.616
50026	12	7.538	12.780	50098	17	6.470	13.558	50170	10	19.874	14.896	50242	37	3.341	16.874	50314	10	0.350	18.178
50027	10	8.184	12.074	50099	10	6.682	13.894	50171	10	20.992	14.306	50243	18	3.880	16.710	50315	10	0.382	18.768
50028	30	8.461	12.408	50100	15	6.696	13.055	50172	11	21.038	14.124	50244	24	3.964	16.859	50316	12	1.666	18.976
50029	10	8.538	12.618	50101	16	7.165	13.641	50173	11	21.273	14.221	50245	16	4.636	16.148	50317	14	2.212	18.116
50030	9	8.599	12.846	50102	15	7.244	13.303	50174	11	21.490	14.514	50246	10	4.823	16.952	50318	10	2.432	18.628
50031*	46	8.628	12.731	50103	10	7.664	13.400	50175	10	21.803	14.464	50247	10	4.879	16.146	50319	12	2.895	18.650
50032	17	8.637	12.470	50104	13	8.420	13.712	50176	12	22.458	14.679	50248	9	5.312	16.563	50320	11	2.958	18.983
50033	29	8.812	12.265	50115	12	8.770	13.456	50177	8	22.954	14.937	50249	10	5.556	16.348	50321	22	3.325	18.814
50034	10	8.826	12.286	50106	10	8.940	13.246	50178	9	0.322	15.262	50250	27	5.822	16.543	50322	34	4.054	18.808
50035	10	9.392	12.504	50107	29	9.683	13.420	50179	18	0.614	15.967	50251	39	6.096	16.546	50323	10	4.556	18.556
50036	37	9.712	12.666	50108*	40	10.192	13.946	50180	26	1.136	15.862	50252	14	7.562	16.129	50324	10	5.166	18.739
50037*	74	10.146	12.684	50109	35	10.718	13.158	50181	10	1.167	15.660	50253	14	8.070	16.710	50325	8	5.213	18.294
50038	11	10.341	12.324	50110	28	11.487	13.086	50182</											



50336	8	13.442	18.928	50408	10	1.938	21.198	50480	10	0.956	23.813	50552	33	22.757	25.476	50645	20	11.142	2.504
50337	8	14.840	18.326	50409	16	2.190	21.257	50481	14	1.524	23.854	50553	13	23.206	25.434	50646*	46	14.457	2.263
50338*	38	15.720	18.436	50410	12	3.058	21.524	50482	15	2.226	23.834	50554	10	23.284	25.149	50647	19	18.178	2.456
50339	15	15.892	18.582	50411	23	3.810	21.397	50483	12	4.601	23.472	50555	37	24.830	25.676	50648	20	24.382	2.750
50340	9	15.980	18.560	50412	11	4.134	21.350	50484	30	4.715	23.833					50649	32	0.984	3.028
50341	20	17.044	18.648	50413	25	4.166	21.444	50485	39	4.746	23.891					50650	13	1.146	3.274
50342	13	17.185	18.256	50414	18	4.587	21.716	50486	13	4.889	23.727					50651	23	1.556	3.088
50343	10	17.336	18.206	50415	11	4.637	21.936	50487	11	5.054	23.974					50652	23	3.879	3.544
50344	12	17.844	18.196	50416	12	4.828	21.748	50488	27	5.440	23.004					50653	16	5.839	3.080
50345	12	19.591	18.158	50417	10	5.168	21.894	50489*	46	5.640	23.994					50654	11	6.430	3.634
50346	24	20.066	18.383	50418	10	5.389	21.220	50490	26	5.686	23.226					50655	14	6.576	3.288
50347	16	22.046	18.166	50419	13	5.406	21.100	50491	40	7.252	23.674					50656	14	7.750	3.323
50348	12	23.100	18.802	50420	17	6.980	21.104	50492	15	8.684	23.140					50657	13	14.492	3.122
50349	12	23.233	18.600	50421	15	7.931	21.554	50493	8	9.520	23.467					50658	14	15.020	3.607
50350	12	23.700	18.518	50422	12	8.466	21.398	50494	14	10.360	23.194					50659	30	15.026	3.968
50351	20	23.797	18.922	50423	11	10.180	21.652	50495	20	10.422	23.175					50660	18	15.384	3.804
50352	12	23.973	18.942	50424	18	10.492	21.536	50496	9	12.194	23.950					50661	20	16.205	3.998
50353	12	25.169	18.274	50425	12	10.584	21.556	50497	13	15.156	23.092					50662	17	16.878	3.962
50354	15	25.433	18.548	50426	43	10.924	21.735	50498	10	17.837	23.625					50663	17	19.076	3.601
50355	18	2.021	19.114	50427	26	11.280	21.378	50499	12	18.922	23.004					50664	17	22.494	3.444
50356	10	2.065	19.123	50428	11	11.706	21.768	50500	11	18.985	23.030					50665	17	0.634	4.142
50357	9	2.554	19.540	50429	10	11.958	21.148	50501*	44	19.738	23.003					50666	12	0.735	4.374
50358	14	2.966	19.618	50430	16	12.227	21.176	50502	14	20.842	23.568					50667	32	1.111	4.547
50359	11	3.152	19.178	50431	10	12.233	21.378	50503	23	21.520	23.896					50668	23	1.309	4.706
50360	11	3.614	19.592	50432	26	12.554	21.214	50504	9	0.120	24.947					50669	12	6.897	4.427
50361	17	4.966	19.209	50433	9	14.524	21.552	50505	8	0.722	24.948					50670	17	9.300	4.426
50362	10	7.054	19.768	50434	39	17.228	21.662	50506	13	1.700	24.667					50671*	37	9.601	4.553
50363	14	10.146	19.596	50435	26	19.525	21.520	50507	8	2.545	24.283					50672*	32	10.720	4.516
50364	39	10.166	19.607	50436	13	21.556	21.327	50508	20	3.034	24.896					50673	16	10.770	4.174
50365	32	15.644	19.942	50437	8	21.720	21.246	50509	9	3.534	24.119					50674	12	13.352	4.730
50366	12	18.059	19.248	50438	33	23.175	21.145	50510	10	4.100	24.242					50675	15	15.050	4.835
50367	10	18.160	19.941	50439	11	24.418	21.722	50511	13	4.114	24.945					50676	36	24.314	4.452
50368*	30	18.646	19.032	50440	10	25.376	21.618	50512	13	5.581	24.519					50677	37	24.492	4.166
50369	27	19.950	19.989	50441	23	0.145	22.422	50513	14	5.698	24.766					50678	14	25.181	4.186
50370	29	19.985	19.394	50442	8	0.464	22.298	50514	28	6.736	24.224					50679	16	0.128	5.757
50371	11	20.454	19.670	50443	35	1.182	22.623	50515	30	6.754	24.960					50680	25	0.257	5.512
50372	28	20.566	19.699	50444	11	1.242	22.671	50516	10	7.286	24.490					50681	16	1.228	5.769
50373	17	21.575	19.154	50445	10	2.516	22.418	50517	38	7.295	24.922					50682	21	1.670	5.714
50374	10	22.256	19.676	50446	8	2.775	22.061	50518	10	7.744	24.691					50683	19	2.186	5.514
50375	26	23.116	19.510	50447	10	2.860	22.728	50519	9	7.876	24.398					50684	26	3.750	5.024
50376	10	23.261	19.634	50448	25	3.035	22.305	50520	10	8.098	24.419					50685	15	5.162	5.504
50377	25	24.939	19.066	50449	12	4.263	22.143	50521	12	10.144	24.797					50686	14	5.284	5.694
50378	15	1.356	20.400	50450	8	4.777	22.482	50522	8	14.818	24.096					50687	16	6.964	5.507
50379	20	2.292	20.584	50451	29	5.500	22.458	50523	14	16.007	24.918					50688	34	8.646	5.224
50380	16	3.268	20.658	50452	10	5.714	22.512	50524	22	16.609	24.864					50689	18	11.616	5.950
50381	14	3.290	20.413	50453	9	5.854	22.374	50525	20	17.122	24.250					50690	25	15.158	5.036
50382	32	4.044	20.642	50454	8	6.346	22.123	50526	16	19.458	24.593					50691	14	15.801	5.264
50383	12	4.201	20.393	50455*	38	6.655	22.852	50527	13	20.298	24.438					50692*	39	15.934	5.230
50384	12	4.876	20.584	50456	10	6.755	22.378	50528*	44	20.784	24.041					50693*	32	16.817	5.671
50385	22	5.943	20.284	50457	13	6.790	22.770	50529	15	21.534	24.086					50694	16	17.236	5.806
50386	8	6.200	20.267	50458	24	7.351	22.154	50530	14	21.784	24.314					50695	34	20.430	5.646
50387	8	6.706	20.685	50459	26	9.096	22.856	50531	16	22.374	24.372					50696	23	22.831	5.954
50388	19	7.864	20.500	50460	9	9.225	22.060	50532	12	1.092	25.780					50697	15	23.278	5.902
50389	11	8.068	20.126	50461	10	9.456	22.753	50533	20	3.600	25.126					50698	18	24.622	5.344
50390	10	8.316	20.010	50462	25	9.574	22.588	50534	12	3.648	25.339					50699	21	0.394	6.846
50391	9	8.818	20.872	50463	34	9.815	22.155	50535	12	3.806	25.146					50700	16	0.526	6.202
50392	11	10.794	20.556	50464	13	11.440	22.409	50536	9	4.654	25.228					50701*	36	0.802	6.316
50393	8	11.949	20.763	50465	10	11.902	22.258	50537	9	5.430	25.622					50702	13	2.192	6.591
50394*	60	12.002	20.934	50466	19	11.916	22.370	50538	28	6.326	25.796					50703	17	4.978	6.770
50395	12	13.778	20.307	50467	11	13.378	22.429	50539	18	6.730	25.029					50704	18	7.526	6.665
50396	33	16.161	20.696	50468	28	13.594	22.736	50540	8	7.095	25.256					50705	24	13.957	6.276
50397	28	16.990	20.784	50469	11	15.282	22.229	50541	8	7.387	25.076					50706	14	15.280	6.319
50398	10	17.192	20.764	50470	10	15.836	22.464	50542	15	7.789	25.215					50707	14	18.222	6.580
50399	25	19.248	20.098	50471	12	17.712	22.787	50543	12	9.782	25.336					50708	14	20.624	6.074
50400	14	19.912	20.236	50472	14	17.811	22.770	50544	10	10.837	25.804					50709	17	22.728	6.150
50401	14	21.174	20.100	50473	10	19.994	22.800	50545	35	14.706	25.328					50710	34	0.582	7.596
50402*	60	21.252	20.843	50474	11	20.389	22.808	50546	29	15.189	25.892					50711*	38	1.138	7.382
50403	22	22.324	20.418	50475	10	20.620	22.084	50547	15	16.689	25.112					50712	16	1.881	7.534
50404	30	23.736	20.795	50476	12	21.548	22.714	50548	23	17.477	25.375					50713	17	3.504	7.391
50405	36	0.392	21.874	50477	21	22.680	22.750	50549	21	20.564	25.600					50714	16	7.499	7



50717*	42	16.064	7.068	50789	15	18.694	12.594	50861	12	1.485	17.204	50933	30	9.632	21.338	51104	19	13.442	0.116
50718*	34	21.017	7.250	50790	11	19.897	12.952	50862	17	2.635	17.108	50934	15	9.708	21.730	51105	10	15.234	0.432
50719	17	22.358	7.053	50791*	44	21.568	12.616	50863	17	6.013	17.182	50935	12	9.933	21.319	51106	12	17.089	0.106
50720	14	24.836	7.002	50792	16	21.600	12.805	50864*	40	7.805	17.684	50936	15	9.970	21.442	51107	10	17.197	0.899
50721	12	5.720	8.030	50793	15	21.956	12.606	50865	14	9.264	17.748	50937	12	12.644	21.096	51108	22	19.340	0.810
50722	30	8.642	8.532	50794	18	21.970	12.205	50866	14	15.500	17.868	50938	15	15.216	21.629	51109	12	19.598	0.672
50723	29	9.522	8.678	50795	22	22.974	12.918	50867	13	15.702	17.940	50939	12	16.612	21.502	51110*	45	21.958	0.786
50724*	28	15.896	8.502	50796	18	25.191	12.696	50868	15	16.824	17.576	50940	12	17.500	21.125	51111	8	0.689	1.662
50725*	20	15.934	8.066	50797	23	0.738	13.355	50869	16	21.236	17.505	50941	16	19.635	21.790	51112	14	1.458	1.440
50726	15	16.042	8.652	50798	23	5.402	13.627	50870	14	22.568	17.114	50942	23	22.816	21.859	51113	13	3.958	1.915
50727	15	17.154	8.790	50799	16	5.621	13.955	50871	17	22.920	17.176	50943	23	23.314	21.878	51114	28	6.401	1.702
50728	13	17.682	8.474	50800	13	5.787	13.289	50872	16	23.054	17.234	50944	19	24.676	21.202	51115	11	9.933	1.906
50729	19	22.944	8.484	50801	18	8.656	13.664	50873	20	23.578	17.114	50945	23	25.323	21.894	51116	15	11.538	1.548
50730	18	23.233	8.454	50802*	34	11.167	13.687	50874*	40	25.360	17.413	50946	17	25.572	21.419	51117	10	14.270	1.762
50731	16	23.740	8.852	50803	30	13.140	13.330	50875	20	0.134	18.114	50947	20	0.852	22.722	51118	16	0.563	2.064
50732	19	23.841	8.364	50804	19	13.864	13.076	50876	13	1.812	18.440	50948	11	3.886	22.572	51119	14	7.812	2.000
50733	12	24.050	8.340	50805	26	14.205	13.168	50877	19	1.914	18.842	50949*	36	4.622	22.077	51120	19	13.342	2.878
50734	17	2.085	9.591	50806	21	14.666	13.922	50878	21	3.068	18.966	50950	21	4.864	22.642	51121	19	14.679	2.702
50735	18	2.234	9.852	50807	34	15.370	13.660	50879	14	3.290	18.164	50951	18	5.316	22.092	51122	10	16.941	2.334
50736	12	2.242	9.433	50808	23	17.115	13.113	50880	17	3.553	18.436	50952*	28	8.442	22.555	51123	26	19.702	2.786
50737*	42	4.236	9.730	50809*	42	18.705	13.879	50881	21	7.230	18.976	50953	12	19.882	22.731	51124	9	22.592	2.670
50738	18	6.090	9.202	50810*	45	21.808	13.774	50882	16	9.651	18.701	50954	29	20.341	22.202	51125	12	22.842	2.812
50739	13	7.731	9.435	50811	16	24.178	13.184	50883	13	12.757	18.766	50955	32	21.050	22.558	51126	17	23.983	2.563
50740	38	9.074	9.214	50812	14	24.540	13.974	50884*	30	19.286	18.450	50956	19	24.714	22.356	51127	15	24.160	2.187
50741*	40	9.662	9.926	50813	21	25.200	13.572	50885	17	22.316	18.054	50957	13	5.666	23.185	51128	13	0.126	3.837
50742	16	10.434	9.174	50814	14	0.491	14.589	50886	20	24.060	18.667	50958	15	7.078	23.816	51129	15	2.004	3.120
50743	21	11.614	9.684	50815	28	0.948	14.928	50887	14	24.724	18.802	50959	20	7.566	23.868	51130	11	6.704	3.954
50744	11	12.681	9.281	50816*	30	4.326	14.982	50888	23	25.691	18.226	50960	26	7.708	23.286	51131	11	20.664	3.293
50745	15	16.972	9.836	50817	13	6.280	14.066	50889	23	1.240	19.448	50961	16	11.431	23.894	51132	13	20.840	3.010
50746	16	22.496	9.852	50818	12	15.315	14.668	50890	16	4.428	19.278	50962	24	12.103	23.552	51133	10	21.249	3.444
50747	36	22.880	9.188	50819	18	16.575	14.050	50891	13	5.164	19.290	50963	14	12.717	23.338	51134	31	1.958	4.825
50748	18	23.314	9.609	50820	22	17.626	14.886	50892	14	5.274	19.376	50964	21	24.080	23.086	51135	31	2.132	4.536
50749	14	23.476	9.235	50821	18	18.107	14.847	50893	16	6.010	19.882	50965	15	24.779	23.129	51136	10	2.822	4.546
50750	30	23.608	9.694	50822	13	18.161	14.782	50894	16	6.629	19.572	50966	19	0.572	24.364	51137	17	3.874	4.508
50751*	82	24.926	9.860	50823	31	20.608	14.936	50895*	62	8.073	19.841	50967	18	17.518	24.152	51138*	67	5.955	4.742
50752	36	25.596	9.376	50824	13	20.972	14.194	50896	20	8.092	19.822	50968	18	18.266	24.416	51139	19	13.442	4.694
50753	25	0.240	10.939	50825	17	21.894	14.444	50897	12	9.530	19.442	50969*	28	18.430	24.156	51140	13	13.752	4.962
50754	16	2.829	10.366	50826	15	23.186	14.850	50898	16	10.414	19.994	50970	14	21.025	24.768	51141	11	18.220	4.148
50755	23	8.300	10.435	50827	36	23.538	14.900	50899	22	15.744	19.342	50971	31	24.681	24.113	51142	11	18.414	4.280
50756	27	12.200	10.555	50828	18	24.471	14.324	50900	13	17.811	19.143	50972	14	24.814	24.798	51143	19	21.486	4.582
50757	21	20.066	10.892	50829	13	1.273	15.328	50901*	34	19.506	19.038	50973	36	0.976	25.466	51144	19	22.124	4.974
50758	13	20.099	10.750	50830	13	6.086	15.789	50902	13	20.734	19.163	50974	15	1.436	25.418	51145	29	23.919	4.980
50759	13	20.901	10.809	50831	17	8.256	15.359	50903	16	21.850	19.968	50975	40	3.072	25.634	51146	10	1.802	5.628
50760	16	23.964	10.580	50832	15	9.552	15.078	50904	17	23.184	19.842	50976	23	6.032	25.652	51147	12	2.280	5.712
50761*	100	0.322	11.406	50833	14	13.530	15.822	50905	24	24.004	19.728	50977	26	10.256	25.463	51148	11	7.348	5.404
50762	16	0.618	11.536	50834	18	14.314	15.512	50906*	42	24.054	19.081	50978	17	11.244	25.818	51149*	40	8.941	5.834
50763	28	2.128	11.208	50835	17	14.624	15.382	50907	25	0.456	20.374	50979	20	15.736	25.696	51150*	90	10.938	5.977
50764	16	9.350	11.028	50836	15	18.404	15.106	50908	24	1.885	20.731					51151*	44	14.622	5.248
50765	20	9.373	11.100	50837	17	20.802	15.468	50909	13	3.102	20.620					51152	20	17.300	5.880
50766	17	9.963	11.606	50838	34	20.996	15.134	50910	16	3.754	20.907					51153	11	17.379	5.644
50767	12	10.856	11.444	50839	18	21.202	15.860	50911	14	8.632	20.754					51154	19	17.426	5.290
50768	16	11.392	11.097	50840*	42	21.242	15.967	50912	29	9.560	20.980					51155	10	17.552	5.234
50769	32	12.656	11.164	50841	23	21.431	15.004	50913	24	18.838	20.160					51156	33	23.541	5.198
50770	13	13.050	11.814	50842	14	21.652	15.226	50914	30	20.290	20.014					51157	16	0.396	6.540
50771	14	16.194	11.700	50843	22	24.956	15.604	50915	16	20.784	20.122					51158	15	0.494	6.344
50772	38	19.420	11.368	50844*	54	0.474	16.261	50916	16	21.232	20.332					51159	14	0.940	6.286
50773	27	23.194	11.176	50845	16	2.539	16.555	50917	18	22.436	20.065					51160*	150	6.096	6.386
50774	19	23.799	11.975	50846	16	3.064	16.014	50918*	42	23.500	20.219					51161	14	16.098	6.912
50775	13	24.301	11.950	50847	16	4.381	16.931	50919	14	23.796	20.518					51162	12	17.593	6.172
50776	14	25.140	11.901	50848	14	4.711	16.076	50920	12	25.748	20.674					51163	13	18.276	6.366
50777	13	0.038	12.930	50849	37	6.646	16.475	50921	36	1.324	21.094					51164	18	21.222	6.424
50778	13	0.499	12.514	50850	16	7.086	16.014	50922	17	2.588	21.654					51165*	30	25.402	6.191
50779	19	1.286	12.658	50851	16	7.424	16.610	50923	12	4.862	21.860					51166	13	0.934	7.444
50780	17	1.734	12.746	50852	17	8.066	16.522	50924*	34	5.535	21.335					51167	14	2.510	7.364
50781	19	2.812	12.204	5085															



51176	10	14.484	8.437	51248	27	9.428	13.960	51320	17	3.278	16.670	51392*	48	1.342	20.600	51464	13	2.709	25.164
51177	12	16.323	8.154	51249	10	10.269	13.408	51321	20	4.829	16.349	51393	11	1.641	20.898	51465	10	3.526	25.234
51178*	100	17.774	8.135	51250	14	13.641	13.473	51322	15	5.360	16.289	51394	25	1.839	20.104	51466	28	7.018	25.916
51179	14	19.262	8.776	51251	15	13.926	13.604	51323	22	6.226	16.236	51395	15	3.936	20.450	51467	19	8.426	25.821
51180	23	22.678	8.016	51252	13	17.781	13.211	51324	20	6.340	16.556	51396	10	4.194	20.548	51468	17	13.823	25.506
51181	28	24.543	8.960	51253	16	18.630	13.670	51325	11	6.403	16.287	51397	27	5.480	20.134	51469	38	22.184	25.857
51182	30	0.582	9.576	51254	27	19.390	13.769	51326	11	6.454	16.200	51398	12	5.787	20.238	51470	11	24.254	25.163
51183	11	1.026	9.990	51255	12	2.240	14.690	51327	25	6.487	16.582	51399	10	6.386	20.451				
51184	12	1.182	9.616	51256	14	2.306	14.342	51328	31	6.820	16.439	51400	12	7.476	20.405				
51185	12	1.436	9.233	51257	25	3.770	14.500	51329	26	7.360	16.991	51401	12	7.524	20.145				
51186	31	3.304	9.731	51258	25	5.244	14.664	51330	15	7.406	16.452	51402	18	8.161	20.406				
51187	18	8.761	9.940	51259	21	5.374	14.923	51331*	40	8.266	16.682	51403	20	8.736	20.931				
51188	12	9.134	9.665	51260	20	5.798	14.060	51332	18	9.128	16.880	51404	14	11.070	20.780				
51189	26	11.188	9.681	51261	22	5.983	14.310	51333	14	10.633	16.882	51405	26	18.355	20.318				
51190	14	18.748	9.964	51262	12	6.343	14.184	51334	17	11.462	16.105	51406	24	19.575	20.206				
51191	10	20.573	9.550	51263*	73	6.648	14.480	51335	35	15.470	16.732	51407*	28	20.282	20.863				
51192	9	20.888	9.450	51264	11	6.650	14.656	51336*	65	17.136	16.598	51408	14	20.927	20.786				
51193	13	22.881	9.722	51265	29	6.838	14.786	51337	12	18.208	16.497	51409	31	23.005	20.578				
51194	13	0.206	10.245	51266	48	6.918	14.815	51338	12	18.825	16.350	51410*	49	24.010	20.560				
51195	25	1.318	10.076	51267	26	6.960	14.725	51339*	27	19.505	16.820	51411	9	2.068	21.854				
51196	15	1.684	10.954	51268	25	6.976	14.852	51340	23	21.192	16.974	51412	18	2.528	21.569				
51197*	106	2.631	10.230	51269*	21	6.996	14.492	51341*	40	21.521	16.578	51413	13	3.422	21.778				
51198	12	4.780	10.210	51270	24	7.058	14.714	51342	20	21.642	16.641	51414	12	3.592	21.028				
51199	10	5.242	10.633	51271	21	7.168	14.808	51343	27	22.132	16.850	51415	18	11.013	21.653				
51200	12	5.636	10.594	51272	35	7.175	14.974	51344	15	24.538	16.958	51416	31	13.318	21.086				
51201	25	7.109	10.534	51273	77	7.380	14.908	51345	27	0.716	17.376	51417	26	14.729	21.250				
51202	16	12.016	10.606	51274	11	7.634	14.904	51346	15	0.725	17.564	51418	19	17.991	21.632				
51203	12	20.190	10.443	51275	25	7.802	14.523	51347	14	0.854	17.622	51419	14	18.501	21.774				
51204*	84	20.374	10.936	51276	62	8.300	14.892	51348	22	1.382	17.492	51420	13	22.300	21.016				
51205	10	21.185	10.420	51277	21	8.643	14.404	51349*	55	3.164	17.774	51421	14	23.012	21.272				
51206	11	22.114	10.863	51278	37	8.946	14.593	51350	26	4.581	17.617	51422	17	24.610	21.076				
51207	21	0.922	11.560	51279	16	9.458	14.612	51351	27	6.256	17.130	51423	25	25.146	21.730				
51208	14	4.354	11.420	51280	10	9.539	14.098	51352	15	6.890	17.664	51424	23	0.674	22.250				
51209	10	4.988	11.194	51281	11	12.099	14.039	51353	18	6.919	17.391	51425	24	1.172	22.262				
51210	16	5.719	11.725	51282	10	22.502	14.620	51354	24	8.215	17.448	51426	13	2.584	22.721				
51211	31	6.310	11.787	51283	15	24.990	14.400	51355	31	10.242	17.336	51427	19	3.184	22.252				
51212	37	7.068	11.110	51284	16	25.993	14.400	51356	10	10.900	17.626	51428	17	13.478	22.574				
51213	12	12.800	11.871	51285	14	0.960	15.232	51357	14	16.926	17.530	51429	12	13.910	22.865				
51214	14	14.950	11.338	51286	29	1.312	15.282	51358	13	19.480	17.424	51430	10	14.310	22.460				
51215	15	19.422	11.738	51287	13	1.766	15.962	51359	13	20.290	17.272	51431	10	14.407	22.580				
51216	13	21.254	11.871	51288	21	2.740	15.966	51360	15	22.496	17.972	51432*	64	14.422	22.680				
51217	19	22.061	11.570	51289	12	4.671	15.190	51361	22	23.040	17.675	51433	15	17.800	22.168				
51218	24	22.878	11.570	51290	15	5.012	15.088	51362	15	0.127	18.450	51434	22	17.824	22.221				
51219	19	22.951	11.918	51291*	78	6.030	15.308	51363	19	3.506	18.582	51435	15	19.510	22.984				
51220	10	24.540	11.377	51292	36	6.210	15.214	51364	23	4.206	18.015	51436	15	19.946	22.200				
51221	10	0.110	12.812	51293	10	6.604	15.120	51365	21	8.287	18.207	51437*	53	21.848	22.626				
51222	14	1.537	12.354	51294	19	6.635	15.433	51366	25	8.466	18.842	51438	18	23.494	22.972				
51223	11	2.880	12.265	51295	20	6.662	15.814	51367*	48	9.033	18.762	51439	20	1.954	23.462				
51224*	24	4.923	12.020	51296	12	6.818	15.408	51368	10	12.880	18.214	51440	12	2.650	23.492				
51225*	86	5.811	12.308	51297	47	6.950	15.466	51369	14	15.750	18.472	51441	11	7.801	23.088				
51226	14	6.178	12.582	51298	26	6.956	15.500	51370	10	15.793	18.468	51442	10	12.176	23.509				
51227	30	6.242	12.994	51299	15	7.060	15.316	51371*	55	17.432	18.034	51443*	48	12.210	23.390				
51228	10	6.460	12.935	51300	46	7.252	15.428	51372	28	18.666	18.680	51444	12	16.656	23.682				
51229*	44	7.609	12.458	51301	15	7.268	15.876	51373	66	22.240	18.230	51445	12	17.368	23.521				
51230	11	9.489	12.966	51302	12	7.477	15.505	51374*	66	22.890	18.464	51446	12	18.190	23.885				
51231	17	11.082	12.987	51303	21	7.934	15.416	51375	14	24.531	18.466	51447	13	18.618	23.894				
51232	24	19.242	12.267	51304	22	8.210	15.624	51376*	41	1.878	19.457	51448*	48	19.464	23.345				
51233	23	20.773	12.947	51305	52	8.458	15.991	51377	23	1.878	19.042	51449	20	20.718	23.805				
51234	26	21.422	12.496	51306	10	9.287	15.363	51378	13	2.548	19.170	51450	18	20.924	23.257				
51235	11	25.337	12.020	51307	10	11.782	15.650	51379	12	7.340	19.734	51451	25	23.458	23.746				
51236	19	25.972	12.752	51308	11	11.890	15.644	51380	31	11.594	19.388	51452	21	2.567	24.478				
51237	17	0.723	13.308	51309	12	12.154	15.683	51381*	34	13.198	19.075	51453	30	5.018	24.621				
51238	14	1.932	13.557	51310	14	14.792	15.196	51382*	38	15.981	19.708	51454	11	7.390	24.622				
51239	15	2.938	13.055	51311	24	20.438	15.459	51383*	66	18.380	19.967	51455	14	7.686	24.131				
51240	15	2.956	13.930	51312	14	21.364	15.046	51384	25	22.465	19.751	51456	26	7.743	24.668				
51241	32	4.015	13.907	51313*	76	21.546	15.098	51385	10	22.476	19.356	51457	10	12.377	24.138				
51242	10	6.262	13.205	51314	19	21.814	15.051	51386	10	24.175	19.983	51458	25	13.524	24.491				
51243	48	6.430	13.382	51315*	68	21.947	15.919	51387	15	24.624	19.151	51459	13	16.399	24.415				
51244	17	7.100	13.322	51316	17	23.475	15.255	51388	10	25.084	19.121	51460	17	17.674	24.013				
51245	33	8.814	1																



51542	31	16.048	2.634	51614	15	21.706	7.964	51686	25	22.564	12.316	51758	11	25.482	17.950	51830	30	8.366	21.273
51543	20	16.328	2.372	51615	21	24.812	7.774	51687	29	25.896	12.658	51759	9	25.624	17.252	51831	18	10.940	21.388
51544	10	16.622	2.999	51616	24	25.775	7.433	51688	11	0.461	13.564	51760	21	0.236	18.223	51832*	36	11.064	21.091
51545	20	17.306	2.088	51617	31	0.312	8.264	51689	10	3.274	13.051	51761	11	0.375	18.382	51833	15	11.836	21.357
51546	20	20.351	2.712	51618	11	0.383	8.055	51690	10	4.168	13.390	51762*	41	0.632	18.706	51834	20	11.850	21.646
51547	19	20.615	2.142	51619	9	9.316	8.460	51691	17	4.476	13.278	51763	19	2.278	18.692	51835	24	12.686	21.373
51548*	43	21.756	2.994	51620	9	13.165	8.088	51692	10	9.778	13.920	51764	30	7.600	18.794	51836	11	12.975	21.435
51549	30	23.228	2.700	51621	12	18.972	8.466	51693	12	15.112	13.253	51765	9	9.303	18.504	51837*	31	14.268	21.592
51550	14	23.496	2.524	51622	9	19.147	8.352	51694	23	23.261	13.560	51766	16	9.344	18.391	51838	24	18.264	21.110
51551	22	25.294	2.432	51623	20	21.872	8.828	51695	12	24.314	13.667	51767	25	11.696	18.364	51839	24	18.992	21.092
51552	14	0.417	3.059	51624	17	22.948	8.222	51696	9	24.970	13.018	51768	30	12.706	18.500	51840	10	18.996	21.326
51553	14	7.378	3.864	51625	25	23.638	8.655	51697	36	25.274	13.700	51769	11	12.988	18.301	51841	26	19.064	21.862
51554	18	8.333	3.252	51626	35	25.264	8.719	51698	14	0.208	14.867	51770	9	16.575	18.893	51842	20	19.868	21.260
51555	10	13.850	3.492	51627	9	25.648	8.464	51699	21	2.688	14.625	51771	32	20.478	18.287	51843	24	20.108	21.348
51556	14	14.113	3.798	51628	8	25.737	8.652	51700	14	2.848	14.234	51772	11	22.260	18.349	51844	12	22.992	21.542
51557	9	15.979	3.287	51629	16	0.532	9.968	51701	20	3.692	14.612	51773	20	24.571	18.456	51845	12	23.839	21.805
51558	22	16.022	3.996	51630	31	2.186	9.188	51702*	37	4.586	14.920	51774	19	24.698	18.341	51846	34	25.870	21.456
51559	13	16.113	3.400	51631	17	5.017	9.937	51703	11	5.084	14.946	51775	15	0.119	19.010	51847	10	2.982	22.664
51560	16	16.236	3.334	51632*	31	6.237	9.810	51704	19	6.800	14.914	51776	12	0.233	19.606	51848	30	6.652	22.940
51561*	35	16.516	3.770	51633	30	7.614	9.877	51705	19	7.562	14.442	51777	19	2.376	19.378	51849	23	7.098	22.177
51562	26	19.364	3.726	51634	16	11.314	9.390	51706*	40	13.154	14.909	51778	10	2.834	19.341	51850	8	7.583	22.028
51563	37	21.518	3.552	51635	16	13.938	9.428	51707	8	22.356	14.460	51779	14	3.116	19.228	51851	28	9.349	22.560
51564	10	22.194	3.831	51636	12	16.086	9.975	51708	23	23.593	14.133	51780*	30	4.022	19.982	51852	10	9.829	22.033
51565	8	23.114	3.512	51637	9	17.829	9.062	51709*	41	24.220	14.678	51781	20	4.285	19.087	51853	21	10.444	22.734
51566	21	23.144	3.247	51638	23	18.052	9.502	51710	10	25.478	14.283	51782	13	5.440	19.524	51854	32	10.638	22.722
51567	9	3.880	4.808	51639	22	18.108	9.450	51711	13	25.776	14.686	51783	15	9.373	19.596	51855	11	11.450	22.842
51568	31	4.314	4.420	51640	16	18.232	9.301	51712	17	1.187	15.494	51784	13	9.892	19.703	51856	14	12.006	22.600
51569	11	4.651	4.183	51641	20	18.932	9.314	51713	32	3.874	15.385	51785*	39	11.098	19.132	51857	9	12.803	22.770
51570	13	9.852	4.908	51642	10	19.966	9.701	51714	10	6.670	15.955	51786	11	11.528	19.586	51858	10	13.398	22.828
51571	30	10.852	4.250	51643	9	20.152	9.674	51715	14	8.932	15.349	51787	16	14.398	19.667	51859	10	14.522	22.240
51572	17	18.678	4.538	51644	12	23.842	9.984	51716	22	11.513	15.709	51788	10	14.758	19.090	51860	21	14.544	22.228
51573	14	19.760	4.258	51645	12	24.984	9.760	51717	22	12.547	15.486	51789	13	15.288	19.300	51861	29	16.202	22.566
51574	16	20.364	4.218	51646	8	0.069	10.838	51718	14	14.528	15.607	51790	22	15.371	19.354	51862	14	17.152	22.026
51575	17	22.110	4.980	51647	10	7.113	10.100	51719	13	14.918	15.942	51791	13	16.028	19.632	51863	21	17.646	22.203
51576	13	24.422	4.540	51648	13	8.207	10.220	51720	15	15.500	15.518	51792	17	17.868	19.490	51864	14	18.282	22.317
51577	10	25.558	4.378	51649	11	11.847	10.840	51721	27	19.692	15.312	51793	13	18.833	19.128	51865	13	19.034	22.654
51578	12	25.648	4.720	51650*	30	12.141	10.408	51722	34	19.931	15.102	51794	31	20.036	19.180	51866	20	19.138	22.943
51579	11	25.942	4.772	51651	12	14.924	10.330	51723	15	22.778	15.986	51795	12	20.358	19.084	51867	17	19.574	22.690
51580	33	1.144	5.435	51652*	36	19.066	10.894	51724	10	22.971	15.752	51796	15	21.644	19.790	51868	10	21.884	22.801
51581	11	1.207	5.112	51653	13	22.324	10.556	51725	8	24.971	15.198	51797	13	21.644	19.090	51869	14	22.738	22.020
51582	28	1.516	5.214	51654	11	23.212	10.647	51726	11	25.576	15.230	51798	13	23.936	19.684	51870	10	22.924	22.094
51583	28	4.008	5.086	51655	11	25.820	10.628	51727	11	0.296	16.950	51799	11	24.662	19.606	51871	25	24.366	22.812
51584	17	6.630	5.891	51656	30	0.547	11.814	51728	18	5.856	16.717	51800	11	24.690	19.366	51872	19	25.924	22.004
51585	16	7.824	5.716	51657	14	2.208	11.605	51729	14	8.412	16.882	51801	31	0.225	20.002	51873	26	1.262	23.982
51586	17	9.878	5.307	51658*	39	4.066	11.124	51730	20	9.313	16.037	51802	35	0.772	20.822	51874	18	1.288	23.210
51587	14	12.514	5.920	51659	21	4.666	11.561	51731	20	12.771	16.872	51803	9	1.464	20.945	51875	11	7.298	23.648
51588	15	15.246	5.082	51660	12	5.376	11.890	51732	21	12.881	16.997	51804*	40	1.773	20.794	51876	22	9.204	23.672
51589	15	16.870	5.356	51661	8	6.760	11.260	51733	11	14.302	16.844	51805	13	1.936	20.214	51877	22	10.417	23.942
51590*	30	18.657	5.931	51662	10	13.754	11.768	51734	10	14.468	16.093	51806	22	4.753	20.952	51878	12	10.712	23.868
51591	29	20.452	5.988	51663	13	16.068	11.436	51735	12	14.491	16.896	51807	19	6.037	20.994	51879	13	11.028	23.953
51592	11	1.453	6.226	51664	18	16.210	11.808	51736	10	15.180	16.264	51808	13	8.512	20.349	51880	10	11.566	23.284
51593*	31	3.013	6.410	51665	14	16.564	11.962	51737*	42	16.882	16.348	51809	14	9.706	20.255	51881	25	12.354	23.269
51594	22	5.168	6.456	51666	8	17.652	11.122	51738	14	18.590	16.194	51810	13	10.227	20.944	51882	9	15.373	23.646
51595	21	5.616	6.766	51667	15	19.428	11.562	51739*	35	18.972	16.418	51811*	31	10.689	20.135	51883	9	18.736	23.900
51596	10	5.690	6.802	51668	19	21.154	11.884	51740	15	19.148	16.478	51812	10	11.407	20.930	51884	18	19.357	23.400
51597	11	8.762	6.808	51669	11	21.462	11.492	51741	13	19.676	16.746	51813	11	14.508	20.761	51885	26	19.460	23.072
51598	13	12.095	6.366	51670	9	23.025	11.315	51742	11	20.558	16.392	51814	9	15.206	20.244	51886	10	20.320	23.974
51599	10	17.386	6.603	51671	33	23.041	11.834	51743	16	25.915	16.652	51815	16	15.585	20.233	51887	32	21.728	23.910
51600	9	21.219	6.918	51672	20	0.625	12.161	51744	11	0.434	17.145	51816	31	15.923	20.966	51888	9	22.931	23.165
51601	9	22.972	6.632	51673	14	3.010	12.238	51745	26	0.776	17.917	51817	14	16.649	20.350	51889	31	24.070	23.125
51602	17	23.992	6.280	51674	25	3.655	12.966	51746	20	2.266	17.186	51818	13	22.102	20.064	51890	29	25.542	23.888
51603	17	24.111	6.704	51675	13	10.828	12.916	51747	21	9.339	17.031	51819*	53	24.419	20.866	51891	22	8.028	24.132
51604*	60	24.144	6.204	51676*	31														



51902	9	18.988	24.430	51971	18	14.042	2.686	52043	11	25.548	7.100	52115	12	23.674	16.738	52187	33	25.645	24.039
51903	35	18.991	24.404	51972*	32	16.435	2.140	52044	28	25.950	7.764	52116	18	13.280	17.037	52188	15	25.704	24.722
51904	20	19.487	24.275	51973	11	21.862	2.330	52045	16	1.136	8.764	52117*	39	14.422	17.364	52189	21	25.915	24.068
51905	11	20.147	24.122	51974	10	22.688	2.169	52046	31	2.758	8.816	52118	14	24.422	17.028	52190	31	0.614	25.090
51906	22	20.562	24.651	51975	34	25.510	2.744	52047	10	17.828	8.243	52119	30	24.750	17.630	52191	17	1.515	25.461
51907	30	22.954	24.150	51976	30	6.624	3.386	52048	13	20.675	8.306	52120	10	2.276	18.442	52192	32	2.206	25.186
51908	34	22.980	24.974	51977	32	7.294	3.440	52049	31	22.040	8.642	52121	10	14.170	18.979	52193	36	12.442	25.742
51909	26	24.151	24.472	51978	15	8.296	3.186	52050	16	5.250	9.721	52122	23	14.864	18.080	52194	46	19.968	25.457
51910	13	25.140	24.004	51979	10	9.122	3.170	52051*	40	6.926	9.132	52123	34	25.144	18.792	52195	11	20.184	25.583
51911	11	25.239	24.242	51980	11	11.602	3.684	52052	11	8.502	9.076	52124	24	5.052	19.750	52196	10	22.562	25.389
51912	19	25.640	24.596	51981*	35	12.683	3.100	52053*	73	9.640	9.111	52125	23	6.146	19.160	52197*	34	23.742	25.190
51913	32	0.468	25.126	51982	16	15.380	3.834	52054*	65	9.802	9.476	52126	19	9.956	19.450	52198	33	25.544	25.187
51914	13	2.073	25.390	51983	23	18.256	3.766	52055	19	12.454	9.170	52127*	10	13.087	19.836				
51915	12	2.912	25.768	51984	29	21.923	3.350	52056	18	17.395	9.661	52128	16	13.168	19.000				
51916	12	4.456	25.371	51985	10	23.166	3.020	52057*	56	21.798	9.586	52129	15	19.286	19.824				
51917	26	4.790	25.909	51986	10	23.365	3.690	52058	13	23.048	9.212	52130	12	21.128	19.530				
51918	32	5.078	25.578	51987	10	23.506	3.114	52059*	33	6.286	10.910	52131*	40	23.170	19.215				
51919	14	8.628	25.098	51988	21	25.694	3.920	52060	33	9.510	10.633	52132*	57	2.014	20.967				
51920	12	8.865	25.954	51989*	45	7.456	4.717	52061*	42	9.544	10.278	52133	17	2.750	20.604				
51921	16	10.058	25.136	51990	23	8.030	4.698	52062	23	10.205	10.005	52134	13	8.280	20.841				
51922	17	10.291	25.252	51991	32	10.255	4.190	52063	34	10.677	10.864	52135	33	8.282	20.822				
51923*	32	13.058	25.058	51992	17	11.304	4.686	52064	10	11.280	10.435	52136	13	14.946	20.514				
51924	22	13.576	25.486	51993	12	13.880	4.349	52065	28	22.432	10.247	52137	29	22.454	20.302				
51925	25	16.619	25.820	51994	22	14.072	4.532	52066	16	23.182	10.514	52138	27	22.608	20.074				
51926	13	21.325	25.877	51995	33	14.476	4.675	52067	24	23.935	10.684	52139	15	22.977	20.820				
51927	24	23.879	25.351	51996	30	14.919	4.540	52068	18	24.983	10.124	52140	24	23.572	20.129				
51928	32	24.572	25.083	51997	11	15.519	4.040	52069	33	0.562	11.950	52141	36	24.382	20.264				
51929	14	25.132	25.079	51998	33	16.224	4.252	52070	21	10.228	11.504	52142	13	25.528	20.152				
				51999	10	6.988	5.264	52071*	39	11.384	11.109	52143	31	3.473	21.545				
				52000	30	7.256	5.952	52072	14	15.830	11.768	52144	16	4.012	21.142				
				52001	17	7.558	5.457	52073	27	16.569	11.684	52145*	41	8.968	21.898				
				52002	17	7.608	5.450	52074	17	18.804	11.595	52146*	32	15.002	21.585				
				52003	15	8.360	5.844	52075*	53	22.444	11.360	52147*	37	16.204	21.099				
				52004	13	8.510	5.411	52076	16	0.093	12.435	52148	12	16.864	21.670				
				52005*	39	11.460	5.360	52077	16	3.426	12.750	52149*	38	17.236	21.367				
				52006	14	14.104	5.755	52078	10	5.354	12.732	52150*	41	21.280	21.754				
				52007	20	14.642	5.662	52079	10	6.058	12.570	52151	31	23.124	21.890				
				52008	19	15.554	5.357	52080	10	9.610	12.360	52152	12	23.444	21.948				
				52009	14	16.630	5.604	52081	26	9.627	12.894	52153	13	23.826	21.830				
				52010	44	16.811	5.140	52082	20	10.856	12.469	52154	34	25.310	21.085				
				52011	12	19.115	5.624	52083	10	11.215	12.116	52155	18	1.982	22.916				
				52012	12	20.174	5.760	52084*	54	11.948	12.739	52156	31	5.433	22.000				
				52013*	41	21.345	5.136	52085	12	12.317	12.910	52157	12	6.562	22.188				
				52014	10	21.935	5.480	52086	14	14.194	12.484	52158	10	7.840	22.908				
				52015	13	24.186	5.479	52087	18	15.673	12.542	52159	20	10.052	22.967				
				52016*	63	1.616	6.313	52088	32	2.813	13.795	52160*	31	12.890	22.507				
				52017	20	7.684	6.722	52089*	35	4.019	13.760	52161*	27	22.664	22.744				
				52018	21	8.924	6.685	52090	11	5.598	13.636	52162	37	22.781	22.611				
				52019*	36	11.525	6.902	52091	10	5.872	13.478	52163	20	23.749	22.824				
				52020	10	12.800	6.538	52092	30	9.210	13.005	52164	32	23.749	22.496				
				52021	28	13.274	6.149	52093	25	11.036	13.772	52165	10	24.474	22.487				
				52022	18	13.778	6.864	52094*	36	11.683	13.916	52166	25	25.882	22.452				
				52023	33	13.909	6.969	52095*	48	13.864	13.479	52167	27	1.684	23.232				
				52024	12	14.145	6.796	52096	10	16.381	13.324	52168	28	3.166	23.980				
				52025	17	14.484	6.762	52097	29	17.046	13.670	52169	21	14.378	23.880				
				52026	14	14.698	6.024	52098	17	25.100	13.022	52170	11	21.126	23.303				
				52027	12	15.344	6.566	52099	14	1.134	14.244	52171	17	21.496	23.415				
				52028	10	16.416	6.494	52100*	38	1.765	14.782	52172	16	21.800	23.712				
				52029	14	17.586	6.560	52101	38	9.419	14.298	52173*	38	22.254	23.128				
				52030*	32	22.866	6.716	52102	30	10.551	14.616	52174*	50	23.634	23.292				
				52031	10	23.322	6.532	52103	14	13.226	14.286	52175	15	25.898	23.450				
				52032	10	2.303	7.873	52104	10	18.418	14.396	52176	19	0.580	24.265				
				52033	12	3.262	7.527	52105	39	24.109	14.714	52177	18	1.778	24.576				
				52034*	45	7.756	7.015	52106	13	24.558	14.172	52178	12	4.356	24.416				
				52035	25	11.830	7.602	52107*	91	11.947	15.499	52179*	40	6.528	24.023				
				52036	23	12.410	7.764	52108*	52	21.315	15.280	52180	17	15.059	24.522				
				52037*	34	13.235	7.175	52109	20	23.126	15.334	52181	14	19.185	24.944				
				52038	17	13.254	7.162	52110	15	23.498	15.316	52182	35	20.739	24.700				
				52039	10	13.916	7.115	52111	18	6.279	16.410	52183	26	24.510	24.275				
				52040	15	14.176	7.140	52112*	52	8.140	16.156	52184*	46	24.979	24.912				
				52041*	34	18.613	7.332	52113*	24	15.096	16.388	52185	15	25.488	24.163				
				52042	10	20.344	7.264	52114	11	22.642	16.600	52186	40	25.544	24.882				

R.A. 18<sup>h</sup> 52<sup>m</sup>

Plate 1242; 1918 July 11.

Provisional Constants.

A	B	C
-01749	+00874	+0891

D	E	F
-00866	-01763	-3242



52287	13	3.560	3.933	52359*	70	17.392	8.794	52431	20	24.712	14.268	52503	15	12.063	21.275	52575	13	0.665	25.430
52288	10	10.513	3.726	52360	23	21.934	8.307	52432	12	25.092	14.881	52504	13	12.076	21.160	52576*	37	1.837	25.213
52289	12	11.157	3.686	52361	16	22.623	8.871	52433	29	1.090	15.364	52505	12	12.286	21.761	52577	14	3.156	25.141
52290	15	15.916	3.776	52362	21	24.551	8.754	52434	22	1.459	15.344	52506	25	14.728	21.764	52578	17	3.492	25.768
52291	23	17.878	3.720	52363*	38	24.998	8.610	52435	8	5.478	15.901	52507	23	17.054	21.101	52579	33	3.638	25.183
52292	22	19.710	3.659	52364	11	25.058	8.910	52436*	100	12.212	15.712	52508*	32	17.776	21.741	52580	9	3.648	25.746
52293	30	20.223	3.261	52365	11	0.925	9.246	52437	18	13.757	15.997	52509*	45	20.552	21.692	52581	9	4.040	25.500
52294	10	22.294	3.104	52366	14	1.203	9.887	52438*	30	14.702	15.990	52510	30	22.673	21.900	52582	9	5.502	25.206
52295	14	24.466	3.562	52367	18	1.647	9.072	52439	23	16.552	15.712	52511	28	23.564	21.955	52583	50	6.982	25.891
52296	23	25.839	3.948	52368	15	13.412	9.828	52440	22	17.796	15.818	52512	11	25.216	21.539	52584	10	7.333	25.860
52297	37	25.872	3.478	52369	15	13.476	9.315	52441	10	0.624	16.640	52513	11	0.139	22.710	52585	11	8.642	25.231
52298	12	4.900	4.312	52370	36	14.404	9.638	52442	17	1.658	16.762	52514*	30	0.728	22.782	52586	27	9.188	25.152
52299	17	12.048	4.286	52371	18	18.672	9.748	52443	20	5.686	16.416	52515	38	0.842	22.648	52587	22	9.977	25.170
52300	20	14.260	4.978	52372	21	19.466	9.532	52444	27	6.910	16.322	52516	35	1.804	22.518	52588	30	12.725	25.102
52301	23	18.737	4.722	52373	13	20.350	9.518	52445	14	14.397	16.426	52517	23	1.812	22.848	52589	14	16.683	25.782
52302	10	19.076	4.464	52374	30	0.324	10.290	52446	22	16.842	16.520	52518	12	2.532	22.500	52590	13	17.169	25.682
52303	32	19.124	4.410	52375	22	1.082	10.544	52447	18	17.288	16.130	52519	27	3.938	22.448	52591	10	19.222	25.732
52304	17	21.594	4.890	52376	11	1.566	10.303	52448	28	19.039	16.928	52520	31	4.309	22.782	52592	12	22.422	25.774
52305	29	23.911	4.528	52377	27	1.832	10.706	52449	20	20.468	16.659	52521	14	5.455	22.276	52593	23	25.240	25.320
52306	16	24.232	4.730	52378	10	2.844	10.860	52450	10	22.976	16.552	52522	24	6.038	22.490	52594	18	25.863	25.580
52307	10	24.944	4.440	52379	21	2.875	10.132	52451	11	25.372	16.488	52523	11	8.110	22.564				
52308	10	1.303	5.950	52380	10	6.040	10.320	52452	24	2.406	17.042	52524*	35	9.454	22.308				
52309	12	1.312	5.670	52381*	81	8.432	10.470	52453	28	2.742	17.641	52525*	41	12.788	22.254				
52310	19	2.014	5.500	52382*	46	8.698	10.821	52454	33	5.750	17.397	52526	24	18.023	22.170				
52311	10	4.450	5.802	52383	11	19.381	10.914	52455	20	10.053	17.397	52527	11	23.890	22.132				
52312	32	5.688	5.327	52384	11	21.380	10.724	52456	12	11.699	17.982	52528	11	25.662	22.308				
52313	12	6.903	5.135	52385	14	23.322	10.231	52457*	61	17.226	17.202	52529	20	25.920	22.130				
52314	30	14.136	5.563	52386	14	25.984	10.384	52458	11	18.822	17.620	52530	39	0.321	23.171				
52315	31	17.297	5.768	52387	62	0.352	11.401	52459*	39	18.946	17.498	52531*	52	1.702	23.318				
52316	21	18.820	5.740	52388	31	8.911	11.299	52460	11	20.834	17.405	52532	19	3.969	23.442				
52317	22	19.995	5.762	52389	23	12.572	11.044	52461	40	23.758	17.629	52533	14	4.160	23.992				
52318	16	24.302	5.673	52390	26	15.164	11.330	52462	10	24.963	17.872	52534	12	4.580	23.200				
52319*	37	0.715	6.754	52391	29	15.262	11.776	52463	32	3.153	18.797	52535	14	5.006	23.185				
52320	19	1.164	6.562	52392	11	19.676	11.146	52464	13	5.556	18.366	52536	15	5.658	23.802				
52321	11	1.276	6.154	52393	24	20.744	11.496	52465	17	7.984	18.620	52537	35	5.842	23.130				
52322	38	6.769	6.603	52394	28	20.964	11.008	52466	30	10.816	18.692	52538	12	8.588	23.604				
52323	25	9.870	6.038	52395	27	21.338	11.054	52467	31	13.576	18.782	52539*	39	9.618	23.428				
52324	23	15.388	6.305	52396	14	22.060	11.957	52468	19	14.078	18.812	52540*	36	13.047	23.607				
52325	24	15.470	6.556	52397	11	24.196	11.368	52469	19	15.506	18.433	52541	28	21.032	23.731				
52326	10	16.324	6.812	52398	18	4.618	12.257	52470	25	17.257	18.179	52542	9	22.848	23.818				
52327	23	16.881	6.190	52399	27	5.975	12.518	52471	18	17.306	18.997	52543*	40	23.354	23.633				
52328	15	20.982	6.787	52400	13	6.706	12.513	52472	10	20.422	18.388	52544	16	24.247	23.102				
52329	20	23.907	6.335	52401	11	8.912	12.919	52473*	52	21.906	18.047	52545	21	25.373	23.770				
52330	15	24.346	6.446	52402	24	12.474	12.884	52474	14	22.480	18.700	52546	10	1.037	24.662				
52331*	33	24.956	6.609	52403	33	14.019	12.380	52475*	41	1.188	19.248	52547	26	2.594	24.288				
52332	12	0.141	7.570	52404	12	14.232	12.399	52476	13	2.405	19.478	52548*	49	3.068	24.918				
52333	10	0.473	7.892	52405	15	18.038	12.193	52477	37	5.762	19.152	52549	25	3.572	24.161				
52334	14	1.133	7.346	52406	10	18.594	12.988	52478	16	10.310	19.552	52550*	40	3.634	24.880				
52335	14	2.750	7.928	52407	29	19.213	12.736	52479	28	11.574	19.228	52551	33	3.724	24.036				
52336	11	2.859	7.432	52408	20	21.606	12.217	52480	29	13.623	19.018	52552	12	3.776	24.426				
52337	13	3.402	7.105	52409	18	22.512	12.715	52481	30	0.486	20.343	52553	21	3.792	24.718				
52338	14	3.690	7.631	52410	21	25.118	12.448	52482	30	0.636	20.116	52554	9	3.855	24.802				
52339	30	3.812	7.761	52411	10	2.380	13.080	52483	20	1.012	20.854	52555	23	3.994	24.062				
52340	19	5.396	7.362	52412	21	3.034	13.026	52484	27	1.599	20.152	52556	10	4.224	24.065				
52341	22	5.590	7.657	52413	11	3.296	13.853	52485	37	2.410	20.280	52557	34	4.418	24.398				
52342	10	8.712	7.187	52414*	52	5.870	13.642	52486	18	3.556	20.152	52558*	40	4.421	24.093				
52343	13	9.957	7.712	52415	32	6.302	13.433	52487*	37	6.175	20.087	52559	20	4.445	24.478				
52344*	31	12.075	7.090	52416	20	6.360	13.972	52488	13	10.812	20.258	52560	20	8.230	24.930				
52345	10	13.474	7.560	52417	15	6.768	13.258	52489*	31	14.752	20.866	52561	11	9.803	24.124				
52346	18	13.541	7.581	52418	19	7.082	13.670	52490	14	16.359	20.888	52562	19	14.664	24.242				
52347	10	14.790	7.397	52419	11	8.801	13.707	52491	10	17.278	20.103	52563	24	14.887	24.128				
52348	11	15.046	7.904	52420	20	8.946	13.058	52492	33	1.174	21.924	52564	18	15.289	24.042				
52349*	39	18.468	7.259	52421	11	9.201	13.500	52493	21	1.496	21.976	52565	11	16.493	24.722				
52350	20	22.531	7.172	52422	28	25.173	13.791	52494	20	1.876	21.854	52566	28	19.930	24.024				
52351	10	2.183	8.798	52423	10	0.392	14.450	52495	10	2.155	21.275	52567*	40	20.034	24.346				
52352	11	2.703	8.120	52424	19	0.443	14.576	52496	34	3.348	21.087	52568	24	20.682	24.302				
52353	10	2.890	8.134	52425	41	2.065	14.732	52497*	38	4.270	21.577	52569*	32	20.897	24.009				
52354*	48	7.290	8.402	52426	19	2.506	14.186	52498*	42	5.066	21.430	52570	13	21.424</					



52629	16	3.473	2.894	52701	10	14.400	6.945	52773	14	14.193	12.196	52845	19	14.908	17.607	52917	25	3.627	22.603
52630	14	4.260	2.021	52702	23	19.618	6.890	52774	24	14.404	12.776	52846	14	15.480	17.572	52918	44	6.781	22.666
52631	14	4.798	2.370	52703	11	20.467	6.508	52775	25	16.719	12.870	52847*	158	19.596	17.876	52919	16	7.560	22.170
52632	42	5.612	2.020	52704	51	21.945	6.398	52776	44	21.052	12.156	52848	47	21.470	17.434	52920	21	8.762	22.486
52633	26	6.538	2.414	52705	40	22.726	6.699	52777	17	21.907	12.087	52849	30	22.286	17.006	52921*	56	11.003	22.539
52634	12	7.023	2.766	52706	18	25.522	6.088	52778	13	23.650	12.349	52850	12	23.409	17.256	52922	25	11.297	22.802
52635	22	10.004	2.772	52707	17	0.066	7.685	52779	18	0.110	13.228	52851	30	23.493	17.972	52923	51	14.838	22.208
52636	44	12.468	2.849	52708*	46	2.480	7.097	52780	12	4.290	13.323	52852	50	1.412	18.128	52924	11	15.725	22.774
52637	15	12.860	2.982	52709	20	9.160	7.216	52781	22	4.690	13.334	52853	16	2.622	18.360	52925	33	16.223	22.988
52638	12	16.242	2.854	52710	14	18.150	7.264	52782	40	5.166	13.436	52854	11	8.742	18.670	52926	25	16.664	22.998
52639	20	16.364	2.372	52711	19	24.598	7.760	52783	24	11.210	13.618	52855	19	15.575	18.254	52927*	44	16.782	22.386
52640	26	16.804	2.230	52712	29	25.335	7.999	52784	40	16.230	13.464	52856	10	15.710	18.869	52928	10	17.080	22.109
52641	12	18.535	2.554	52713	38	4.102	8.328	52785	20	16.578	13.898	52857	13	16.336	18.989	52929	15	18.527	22.228
52642	11	19.842	2.236	52714	28	4.548	8.136	52786	11	18.899	13.700	52858*	55	17.759	18.882	52930	13	19.384	22.998
52643	15	20.360	2.966	52715	18	4.788	8.826	52787	54	19.514	13.436	52859	15	18.585	18.074	52931	37	20.090	22.592
52644	22	20.399	2.455	52716	14	15.625	8.850	52788	30	20.214	13.530	52860	17	18.885	18.403	52932	12	21.276	22.148
52645	16	22.348	2.634	52717	27	19.350	8.415	52789*	72	20.882	13.900	52861	15	18.902	18.852	52933	15	21.614	22.540
52646*	50	3.357	3.954	52718*	74	22.076	8.432	52790	27	25.273	13.830	52862	13	19.820	18.072	52934	15	23.386	22.962
52647	11	3.366	3.115	52719	48	22.740	8.130	52791	27	0.380	14.950	52863	13	20.177	18.190	52935	40	24.797	22.778
52648	20	5.423	3.158	52720	24	24.286	8.740	52792	23	2.330	14.755	52864	23	21.912	18.480	52936	52	25.509	22.283
52649*	60	6.022	3.442	52721	20	0.176	9.385	52793	31	2.782	14.273	52865	18	23.765	18.760	52937	18	1.966	23.599
52650	20	10.444	3.259	52722	25	2.100	9.247	52794	25	4.370	14.702	52866	21	24.521	18.832	52938	20	4.692	23.614
52651*	42	12.045	3.910	52723	12	2.520	9.608	52795	16	5.510	14.272	52867	15	0.150	19.218	52939*	40	4.750	23.910
52652	12	12.480	3.932	52724*	54	2.542	9.097	52796	16	9.484	14.926	52868	15	1.788	19.625	52940	15	5.758	23.754
52653	24	15.318	3.805	52725	15	2.608	9.396	52797	14	11.246	14.475	52869	18	4.375	19.384	52941	33	7.478	23.964
52654	20	20.016	3.590	52726	20	4.685	9.644	52798	18	11.495	14.812	52870	35	4.449	19.274	52942	11	8.171	23.966
52655	22	20.702	3.468	52727	26	7.566	9.402	52799	14	12.387	14.016	52871	20	4.994	19.141	52943	34	12.924	23.344
52656	12	20.812	3.920	52728	16	10.411	9.930	52800	10	12.609	14.771	52872*	60	5.126	19.928	52944	15	13.366	23.060
52657	26	21.099	3.666	52729	26	13.970	9.822	52801	16	20.070	14.928	52873	56	5.627	19.332	52945	15	13.752	23.768
52658	12	22.757	3.324	52730	14	14.678	9.240	52802	16	21.603	14.512	52874	29	6.486	19.360	52946	10	17.900	23.655
52659	12	24.995	3.178	52731	10	15.530	9.556	52803	24	23.005	14.482	52875	60	6.498	19.573	52947	12	18.472	23.934
52660	16	1.956	4.056	52732	16	16.234	9.587	52804*	62	23.290	14.140	52876	23	8.700	19.076	52948	28	20.364	23.070
52661	12	2.442	4.926	52733	13	21.082	9.309	52805	29	25.784	14.352	52877	10	10.260	19.052	52949	14	22.709	23.178
52662	25	3.331	4.426	52734	13	21.164	9.980	52806	23	1.260	15.141	52878	20	10.618	19.197	52950	24	22.749	23.287
52663	38	4.940	4.977	52735	11	21.407	9.405	52807	18	2.712	15.368	52879	12	10.960	19.134	52951	27	22.760	23.986
52664	18	7.742	4.606	52736	25	24.625	9.550	52808	17	3.878	15.894	52880	25	15.758	19.760	52952*	90	23.792	23.933
52665	14	8.219	4.360	52737	16	0.887	10.738	52809*	107	5.213	15.650	52881	20	18.374	19.913	52953	20	24.728	23.498
52666	20	12.264	4.006	52738	14	3.554	10.859	52810	16	8.460	15.348	52882	12	18.962	19.912	52954	12	0.576	24.330
52667*	48	13.360	4.590	52739	49	6.168	10.661	52811	38	8.714	15.140	52883	15	21.215	19.506	52955*	56	1.078	24.139
52668	10	14.217	4.278	52740*	73	9.902	10.981	52812	23	10.743	15.456	52884	23	22.612	19.538	52956	23	3.102	24.250
52669	27	16.320	4.180	52741	25	12.006	10.377	52813	12	13.506	15.480	52885*	76	23.010	19.320	52957	11	6.773	24.083
52670	10	17.470	4.830	52742	25	13.177	10.580	52814	15	13.691	15.370	52886	40	23.014	19.210	52958	32	10.528	24.142
52671	37	18.806	4.442	52743	14	17.960	10.960	52815	13	14.071	15.152	52887	20	3.808	20.324	52959	16	10.822	24.202
52672	11	18.973	4.085	52744	29	18.080	10.672	52816	50	14.129	15.215	52888	37	3.850	20.260	52960	12	13.487	24.834
52673	16	19.059	4.640	52745	21	19.770	10.760	52817	21	14.996	15.846	52889	20	5.161	20.618	52961	13	14.066	24.960
52674	24	20.880	4.971	52746	13	21.500	10.800	52818	20	15.528	15.334	52890*	50	6.114	20.513	52962	11	15.508	24.996
52675	15	21.290	4.902	52747*	100	21.508	10.712	52819	19	17.966	15.856	52891	13	9.727	20.918	52963	11	17.588	24.254
52676	23	21.470	4.484	52748*	52	23.741	10.730	52820	19	21.126	15.920	52892	11	12.836	20.784	52964	12	18.687	24.473
52677	43	21.511	4.454	52749	20	25.022	10.628	52821	31	22.900	15.272	52893*	72	13.150	20.108	52965	49	19.828	24.506
52678	36	22.800	4.179	52750	22	8.378	11.578	52822	25	23.540	15.481	52894	16	15.794	20.070	52966*	63	21.230	24.072
52679	28	24.570	4.239	52751	12	8.806	11.573	52823	11	0.790	16.142	52895	14	16.050	20.166	52967	11	0.710	25.218
52680	47	24.916	4.823	52752	42	9.976	11.562	52824	46	3.684	16.704	52896	40	18.000	20.847	52968	30	2.988	25.801
52681	23	25.806	4.729	52753	37	10.804	11.648	52825	27	6.702	16.398	52897	26	18.906	20.680	52969	14	5.225	25.132
52682	27	1.410	5.029	52754	12	12.840	11.890	52826	13	7.204	16.408	52898	38	19.404	20.222	52970	19	6.785	25.462
52683	17	1.732	5.228	52755	10	15.656	11.406	52827	22	9.592	16.564	52899	42	20.476	20.838	52971	17	8.289	25.470
52684	29	4.442	5.792	52756*	125	16.440	11.344	52828	19	9.951	16.160	52900	39	20.966	20.590	52972	49	13.250	25.264
52685	14	15.870	5.964	52757*	62	17.808	11.216	52829	19	15.022	16.892	52901	17	25.987	20.944	52973	13	14.685	25.890
52686	30	16.962	5.640	52758	19	19.278	11.830	52830	13	16.714	16.182	52902	15	5.860	21.146	52974	19	15.444	25.511
52687	21	22.040	5.976	52759	15	19.466	11.060	52831	26	18.990	16.607	52903	14	6.239	21.134	52975	18	16.806	25.029
52688	16	23.924	5.600	52760	22	19.650	11.924	52832	20	20.628	16.512	52904	38	6.269	21.964	52976	13	19.541	25.860
52689	24	1.430	6.832	52761	33	19.847	11.829	52833	14	20.974	16.192	52905	21	13.820	21.270	52977	34	19.772	25.112
52690	14	1.816	6.170	52762	19	20.145	11.850	52834	25	24.710	16.592	52906	26	17.064	21.500	52978	30	20.299	25.360
52691	16	1.865	6																







53344	19	8.652	23.182	53415	12	7.857	1.485	53487	12	19.042	4.036	53559*	26	3.158	8.336	53631	16	11.962	11.500
53345	22	9.070	23.689	53416	10	9.277	1.600	53488	11	20.420	4.158	53560	11	4.020	8.880	53632	10	12.614	11.116
53346	22	13.160	23.520	53417	28	10.074	1.594	53489	26	1.645	5.808	53561	17	7.086	8.395	53633	14	13.072	11.790
53347	19	15.066	23.688	53418	12	11.293	1.580	53490*	26	2.592	5.338	53562	20	9.440	8.830	53634	22	15.048	11.870
53348*	60	17.390	23.739	53419	10	11.517	1.214	53491	13	3.108	5.920	53563	21	9.944	8.621	53635	12	15.781	11.011
53349	38	23.141	23.224	53420	20	12.208	1.881	53492	12	5.324	5.636	53564*	32	10.998	8.984	53636	11	18.367	11.440
53350	10	24.532	23.727	53421*	97	12.482	1.079	53493	13	5.756	5.318	53565	20	12.000	8.816	53637	10	18.795	11.770
53351	18	24.933	23.424	53422	10	13.589	1.508	53494	18	5.772	5.916	53566	14	14.211	8.170	53638	10	22.343	11.665
53352	15	25.070	23.400	53423	14	17.042	1.196	53495	14	7.516	5.896	53567	10	14.792	8.606	53639	13	22.708	11.560
53353	10	6.221	24.149	53424*	41	17.532	1.190	53496	12	8.476	5.954	53568	22	17.190	8.442	53640	10	22.858	11.320
53354	13	9.294	24.830	53425	22	19.326	1.621	53497	10	8.955	5.674	53569	15	17.858	8.984	53641	12	25.292	11.377
53355	20	13.150	24.775	53426	20	19.928	1.153	53498	16	8.972	5.228	53570*	31	18.593	8.744	53642	12	25.883	11.260
53356	11	14.768	24.700	53427	16	19.932	1.120	53499	19	10.006	5.306	53571	26	22.791	8.354	53643	17	3.463	12.755
53357	12	15.590	24.358	53428	10	22.220	1.204	53500	11	10.233	5.680	53572	12	23.306	8.652	53644	10	4.164	12.650
53358*	36	24.302	24.795	53429	10	22.778	1.428	53501	12	10.712	5.562	53573	10	25.466	8.941	53645	12	6.232	12.180
53359	28	0.889	25.922	53430	15	24.202	1.450	53502	13	12.650	5.748	53574*	33	0.648	9.740	53646	23	8.542	12.101
53360	12	3.274	25.578	53431	18	1.128	2.791	53503	13	12.756	5.050	53575	17	2.513	9.712	53647	10	12.398	12.208
53361	22	4.852	25.647	53432*	35	4.932	2.028	53504	19	15.880	5.109	53576	10	7.404	9.488	53648	29	13.065	12.556
53362	28	4.926	25.996	53433	22	5.202	2.819	53505	17	17.012	5.315	53577	18	8.606	9.809	53649	10	13.886	12.994
53363	50	4.950	25.925	53434	12	5.994	2.962	53506	10	18.410	5.656	53578	12	9.170	9.154	53650	10	13.936	12.914
53364	36	6.792	25.294	53435	11	9.568	2.490	53507	11	20.534	5.826	53579	17	13.217	9.646	53651	10	14.466	12.454
53365	42	7.785	25.809	53436	10	12.890	2.184	53508	11	21.234	5.462	53580	10	13.326	9.690	53652	13	14.590	12.202
53366	27	8.815	25.436	53437	10	13.348	2.580	53509	13	21.758	5.546	53581	17	13.920	9.400	53653	14	15.856	12.694
53367	13	9.830	25.856	53438	17	13.463	2.436	53510	10	22.003	5.172	53582*	30	15.295	9.534	53654	22	16.410	12.368
53368	13	10.381	25.824	53439	15	13.656	2.494	53511	19	24.550	5.352	53583	12	18.092	9.844	53655	13	17.990	12.407
53369	15	11.682	25.820	53440	12	14.226	2.302	53512	13	25.704	5.943	53584	11	18.128	9.180	53656	13	19.810	12.386
53370	26	13.568	25.364	53441	15	14.406	2.394	53513	15	1.581	6.015	53585	14	19.388	9.146	53657	11	20.928	12.716
53371	35	25.293	25.226	53442*	39	15.952	2.762	53514	10	2.388	6.278	53586*	31	19.974	9.768	53658	10	21.434	12.615
53372	20	16.817	25.326	53443	11	16.726	2.677	53515	17	2.831	6.320	53587*	46	22.090	9.565	53659	13	22.564	12.768
53373	14	22.344	25.930	53444*	41	17.385	2.893	53516	11	3.568	6.618	53588	22	22.580	9.723	53660	11	22.863	12.424
53374	10	22.945	25.244	53445*	40	17.445	2.848	53517	10	11.514	6.760	53589	19	23.126	9.810	53661	10	23.232	12.740
53375	25	23.048	25.184	53446*	32	17.498	2.910	53518	14	11.590	6.964	53590	23	23.540	9.709	53662	12	24.662	12.130
53376	25	23.332	25.832	53447	15	18.193	2.110	53519*	63	12.933	6.493	53591	24	0.393	10.258	53663	12	25.144	12.562
53377	28	23.385	25.976	53448	28	20.518	2.168	53520	10	13.937	6.481	53592	11	0.965	10.668	53664	14	1.767	13.837
				53449	20	20.754	2.727	53521	25	14.104	6.222	53593	10	1.106	10.902	53665	58	2.724	13.064
				53450	11	20.770	2.146	53522	13	14.830	6.273	53594	16	2.003	10.092	53666	16	2.771	13.183
				53451	16	21.538	2.548	53523	16	17.378	6.842	53595	12	2.282	10.641	53667	10	3.930	13.788
				53452	12	21.841	2.052	53524	15	19.192	6.304	53596	13	2.710	10.664	53668	11	4.538	13.022
				53453	18	22.158	2.120	53525	11	19.538	6.298	53597	10	3.975	10.414	53669	10	7.791	13.930
				53454	14	23.490	2.868	53526	10	20.700	6.141	53598	19	7.134	10.470	53670	19	8.280	13.320
				53455	12	25.261	2.113	53527	22	21.486	6.120	53599	16	7.718	10.469	53671*	31	9.003	13.054
				53456	12	1.016	3.100	53528	10	21.854	6.932	53600	10	8.734	10.462	53672	17	9.484	13.365
				53457*	31	1.504	3.140	53529	10	22.550	6.379	53601	15	9.410	10.608	53673	13	10.416	13.359
				53458	17	7.175	3.700	53530	11	22.689	6.758	53602	10	10.968	10.137	53674	12	13.561	13.470
				53459	27	10.121	3.036	53531	10	23.183	6.485	53603*	42	11.276	10.564	53675	10	16.744	13.017
				53460	10	11.234	3.155	53532*	22	23.880	6.600	53604	10	11.290	10.258	53676	10	17.776	13.240
				53461	26	12.488	3.334	53533*	29	23.982	6.666	53605	22	11.975	10.624	53677	10	17.920	13.475
				53462	27	12.784	3.402	53534	20	1.280	7.884	53606	22	12.794	10.386	53678	10	18.667	13.375
				53463	13	13.347	3.282	53535	17	1.754	7.968	53607	12	15.126	10.274	53679	20	19.058	13.758
				53464	10	15.226	3.663	53536	10	3.958	7.424	53608	10	16.031	10.660	53680	12	19.470	13.835
				53465	20	17.510	3.566	53537	10	5.465	7.430	53609	10	16.586	10.539	53681	11	19.738	13.172
				53466	15	18.147	3.315	53538	10	7.750	7.080	53610	15	16.764	10.205	53682*	40	20.317	13.858
				53467	11	18.697	3.894	53539	10	7.831	7.176	53611	10	17.490	10.620	53683	10	20.936	13.390
				53468	12	21.006	3.604	53540	14	9.217	7.868	53612	14	17.802	10.090	53684	10	21.155	13.208
				53469*	30	21.616	3.290	53541	13	9.716	7.444	53613	18	19.956	10.656	53685	15	21.171	13.048
				53470	10	21.914	3.580	53542*	32	14.126	7.594	53614*	38	21.310	10.197	53686	26	21.222	13.470
				53471	10	22.434	3.580	53543	17	16.940	7.407	53615	18	21.644	10.320	53687	22	21.970	13.684
				53472	10	25.667	3.338	53544	13	17.293	7.909	53616	19	22.141	10.512	53688	19	23.295	13.960
				53473	15	0.206	4.426	53545	11	17.953	7.980	53617	10	22.654	10.776	53689*	78	1.200	14.121
				53474	17	5.236	4.315	53546	22	19.070	7.721	53618	11	23.370	10.158	53690	16	1.782	14.648
				53475	10	6.284	4.520	53547	21	19.326	7.230	53619	11	24.736	10.136	53691	14	3.274	14.900
				53476	11	7.470	4.701	53548	21	19.610	7.720	53620	11	25.836	10.167	53692*	25	9.146	14.623
				53477	20	7.640	4.266	53549	16	20.064	7.909	53621	10	25.882	10.235	53693*	42	15.026	14.960
				53478	22	8.366	4.965	53550*	29	21.906	7.727	53622*	36	0.464	11.908	53694	21	16.076	14.432
				53479	10	9.064	4.673	53551	10	22.250	7.320	53623*	48	3.592	11.100	53695*	36	16.330	14.484
				53480	13	10.797	4.410	53552	25	24.030	7.204	53624	15	4.050	11.234	53696	14	19.696	14.799
				53481															



53703	14	25.557	14.994	53775	18	17.292	17.446	53847	12	21.659	20.254	53919	23	11.619	23.684
53704	18	0.429	15.218	53776	12	17.587	17.680	53848	15	22.070	20.982	53920	13	11.684	23.156
53705*	37	0.886	15.392	53777	10	18.354	17.794	53849	15	25.510	20.071	53921	17	12.820	23.086
53706	17	1.603	15.554	53778	10	22.292	17.019	53850	10	25.650	20.629	53922	16	14.964	23.568
53707	13	1.654	15.480	53779	11	22.424	17.648	53851	13	25.863	20.424	53923	17	15.690	23.200
53708	19	3.270	15.413	53780	11	22.588	17.538	53852	18	0.257	21.960	53924	14	15.813	23.861
53709*	23	3.650	15.507	53781	10	22.812	17.211	53853	11	0.531	21.451	53925	14	16.662	23.189
53710	22	7.566	15.188	53782	13	24.352	17.820	53854	15	2.021	21.806	53926	10	16.870	23.772
53711*	26	10.096	15.386	53783	22	25.542	17.807	53855	12	3.386	21.083	53927	22	17.223	23.743
53712	14	14.700	15.900	53784	11	25.726	17.777	53856	11	3.544	21.590	53928	20	17.902	23.073
53713	14	16.100	15.130	53785	14	25.858	17.942	53857	11	4.892	21.748	53929	10	17.943	23.585
53714	18	16.956	15.780	53786	12	2.842	18.238	53858	10	7.514	21.836	53930	12	18.200	23.576
53715	10	18.350	15.245	53787*	28	3.190	18.932	53859	16	8.400	21.094	53931	10	18.630	23.583
53716	17	18.678	15.926	53788	14	4.334	18.329	53860	26	9.408	21.070	53932*	32	20.054	23.130
53717	17	18.930	15.475	53789*	43	7.762	18.988	53861	13	11.280	21.926	53933	12	20.406	23.875
53718	16	20.026	15.240	53790	14	8.228	18.766	53862	20	12.280	21.740	53934	20	22.232	23.574
53719	11	20.278	15.752	53791	13	9.092	18.478	53863	11	13.726	21.145	53935	14	22.879	23.271
53720*	33	21.965	15.364	53792	13	9.413	18.140	53864	10	13.806	21.356	53936	10	23.806	23.866
53721	17	22.616	15.287	53793	10	11.247	18.164	53865	12	15.336	21.743	53937*	25	2.066	24.959
53722	11	22.632	15.125	53794	10	11.518	18.706	53866	12	15.672	21.336	53938	10	8.294	24.573
53723	17	23.138	15.234	53795	23	12.952	18.823	53867	15	15.744	21.045	53939	23	8.378	24.606
53724	12	23.188	15.258	53796	11	13.879	18.203	53868	10	16.190	21.226	53940	11	9.594	24.916
53725	27	23.748	15.062	53797	11	16.852	18.211	53869	15	17.558	21.680	53941	17	11.422	24.558
53726	11	25.824	15.378	53798	10	17.523	18.942	53870	22	17.886	21.834	53942	17	11.652	24.033
53727	13	0.219	16.680	53799	19	18.728	18.385	53871	15	18.644	21.164	53943	10	14.295	24.570
53728	24	0.256	16.138	53800	13	18.935	18.246	53872	10	18.849	21.600	53944	16	14.803	24.799
53729	19	1.834	16.583	53801	10	21.132	18.289	53873	17	20.681	21.824	53945*	26	16.079	24.651
53730	17	2.140	16.355	53802	22	21.341	18.513	53874	22	20.866	21.824	53946	23	18.080	24.838
53731*	35	2.404	16.324	53803	12	25.615	18.085	53875	18	21.440	21.430	53947	10	21.969	24.379
53732	15	7.734	16.720	53804	12	25.980	18.604	53876	11	23.156	21.199	53948	11	24.002	24.995
53733	26	9.454	16.568	53805*	31	2.081	19.650	53877	11	23.537	21.778	53949	28	24.401	24.084
53734	18	11.598	16.476	53806	13	5.829	19.670	53878	19	24.170	21.910	53950	23	0.816	25.362
53735	26	11.842	16.023	53807	16	7.151	19.450	53879	13	24.318	21.181	53951	10	3.108	25.571
53736*	37	13.556	16.124	53808	10	9.748	19.426	53880	17	25.117	21.863	53952	10	4.129	25.712
53737	10	15.002	16.500	53809	16	10.474	19.254	53881	16	25.412	21.636	53953	15	4.273	25.033
53738	19	16.029	16.714	53810	12	14.286	19.867	53882	21	25.707	21.742	53954	14	5.824	25.976
53739	18	17.571	16.280	53811	10	15.120	19.902	53883	26	1.632	22.074	53955	29	6.068	25.726
53740	11	17.881	16.476	53812	10	15.929	19.530	53884	17	3.708	22.150	53956	16	7.670	25.560
53741	12	18.035	16.234	53813	11	17.418	19.066	53885	10	4.024	22.500	53957	26	8.070	25.357
53742	18	18.654	16.029	53814	12	17.984	19.818	53886	14	4.340	22.874	53958	12	10.322	25.874
53743	14	19.535	16.323	53815	10	18.570	19.332	53887	16	7.100	22.466	53959	12	11.466	25.146
53744	14	19.669	16.777	53816	22	18.740	19.492	53888	11	7.112	22.848	53960*	23	11.676	25.099
53745	10	20.672	16.627	53817	10	19.410	19.402	53889	16	8.060	22.539	53961	10	11.978	25.451
53746	12	20.796	16.914	53818	22	19.900	19.794	53890	14	9.234	22.678	53962	10	14.287	25.286
53747	10	22.104	16.208	53819	22	22.672	19.755	53891	15	9.750	22.490	53963	14	15.022	25.066
53748*	34	23.670	16.770	53820*	23	23.190	19.196	53892	25	12.303	22.844	53964	25	16.636	25.949
53749	13	23.998	16.500	53821	24	25.124	19.464	53893	10	12.665	22.201	53965	12	17.324	25.516
53750	12	25.740	16.050	53822	13	25.246	19.717	53894	12	13.404	22.658	53966	22	17.451	25.558
53751	26	0.560	17.067	53823	12	25.577	19.524	53895	15	13.940	22.696	53967	10	17.512	25.160
53752	12	1.140	17.460	53824	14	5.334	20.128	53896	11	14.410	22.678	53968	12	18.559	25.259
53753	16	1.590	17.780	53825	10	5.980	20.720	53897	21	14.914	22.126	53969	17	18.616	25.042
53754	10	2.262	17.594	53826	22	6.076	20.079	53898	26	17.238	22.443	53970	13	18.632	25.494
53755	12	3.710	17.114	53827	28	6.486	20.256	53899	14	17.442	22.842	53971	17	18.894	25.650
53756	10	4.140	17.956	53828	12	6.927	20.941	53900	24	17.796	22.284	53972	11	19.184	25.642
53757	23	7.244	17.852	53829	16	7.898	20.690	53901*	28	18.254	22.629	53973	24	21.253	25.922
53758	10	8.558	17.360	53830	12	8.232	20.705	53902	11	18.300	22.441	53974	25	22.152	25.220
53759	16	8.660	17.996	53831	27	8.576	20.550	53903	21	19.118	22.378	53975	18	22.730	25.138
53760	14	10.782	17.680	53832	11	14.312	20.684	53904	26	21.555	22.217	53976	11	23.132	25.296
53761	17	11.600	17.358	53833	18	14.642	20.422	53905	13	23.882	22.790	53977	16	23.944	25.152
53762	21	12.064	17.251	53834	13	15.130	20.622	53906	13	24.148	22.240	53978	12	24.000	25.400
53763	10	12.184	17.010	53835	10	15.304	20.650	53907	27	0.886	23.402				
53764*	75	12.298	17.436	53836	14	16.058	20.144	53908	11	2.289	23.889				
53765	14	12.920	17.615	53837	17	17.730	20.920	53909	18	2.684	23.581				
53766	12	14.572	17.090	53838	12	17.756	20.790	53910	15	2.820	23.558				
53767	11	14.864	17.755	53839	19	18.060	20.452	53911	10	2.913	23.274				
53768	12	15.188	17.693	53840	10	18.195	20.110	53912	24	3.902	23.160				
53769	10	15.340	17.141	53841	12	19.506	20.404	53913*	29	4.510	23.198				
53770	12	15.501	17.418	53842	19	20.193	20.056	53914	10	4.653	23.110				
53771	12	15.760	17.190	53843	21	20.228	20.348	53915	17	5.185	23.705				
53772	16	16.224	17.596	53844	14	20.365	20.488	53916	12	6.640	23.657				
53773	16	16.308	17.312	53845	14	20.500	20.100	53917	23	10.888	23.000				
53774	12	16.902	17.319	53846	19	21.566	20.050	53918	14	11.614	23.535				

R.A. 19<sup>h</sup> 24<sup>m</sup>

Plate 1262; 1918 Aug. 27.

Provisional Constants.

A	B	C
-01734	+00581	-0331

D	E	F
-00596	-01763	-2069

Mag. = 16.0 - 1.09√d

No.	d	x	y
54001	11	1.698	0.856
54002	10	6.460	0.955
54003	13	8.253	0.490
54004	12	8.350	0.677
54005	15	8.805	0.123
54006	29	9.142	0.700
54007	10	11.984	0.900
54008	12	14.352	0.760
54009	12	15.936	0.777
54010	21	19.582	0.943
54011	15	22.952	0.084
54012	17	25.398	0.305
54013	23	1.694	1.624
54014	10	3.596	1.274
54015	32	5.801	1.508
54016	29	5.825	1.747
54017*	40	9.318	1.186
54018	10	15.309	1.654
54019	12	16.189	1.440
54020	28	20.142	1.326
54021*	35	25.254	1.836
54022	16	1.506	2.290
54023	10	2.756	2.276
54024	18	7.294	2.772
54025	11	8.414	2.826
54026	16	14.418	2.460
54027	24	16.465	2.046
54028	12	21.072	2.169
54029	13	22.730	2.895
54030	18	0.994	3.054
54031*	33	4.923	3.668
54032	10	6.212	3.776
54033	10	8.654	3.580
54034	26	8.910	3.604
54035*	32	10.754	3.915
54036*	34	11.230	3.082
54037	11	11.454	3.808
54038	10	12.172	3.120
54039*	34	12.567	3.498
54040	10	13.282	3.152
54041	12	13.458	3.310
54042	29	15.202	3.429
54043	10	20.512	3.688
54044	12	20.810	3.846
54045	17	24.433	3.668
54046	31	4.654	4.420
54047	28	5.168	4.684
54048	12	6.237	4.503
54049	22	7.936	4.668
54050	10	9.850	4.818
54051	10	10.817	4.956
54052*	35	12.622	4.080
54053	11	14.167	4.157
54054	14	14.345	4.128
54055	10	14.620	4.522



54056	31	16.866	4.242	54128	15	22.999	9.782	54200	28	13.524	15.685	54272	13	3.175	20.236	54344	13	0.446	25.332
54057	11	16.915	4.616	54129	14	23.486	9.044	54201	30	16.886	15.991	54273	13	3.534	20.585	54345	15	1.660	25.336
54058	27	19.199	4.890	54130	10	0.570	10.368	54202	31	18.425	15.409	54274	19	4.414	20.896	54346	15	1.715	25.175
54059	34	22.984	4.834	54131	15	0.694	10.000	54203	10	18.972	15.662	54275	17	5.334	20.042	54347	18	1.718	25.580
54060	24	2.075	5.525	54132	12	3.406	10.327	54204	13	19.800	15.641	54276	27	7.718	20.536	54348	34	5.036	25.100
54061	17	5.082	5.336	54133	12	3.453	10.395	54205	11	20.004	15.614	54277	26	10.042	20.814	54349	12	5.872	25.821
54062	30	7.252	5.020	54134	31	3.575	10.751	54206	12	24.785	15.676	54278	13	10.433	20.228	54350	13	14.294	25.260
54063	12	10.991	5.410	54135	25	5.807	10.999	54207*	43	1.300	16.954	54279	25	10.674	20.465	54351	13	14.658	25.868
54064	32	12.625	5.980	54136	18	15.053	10.262	54208	12	1.626	16.682	54280	12	10.912	20.134	54352	11	15.396	25.898
54065	32	14.627	5.054	54137*	38	18.726	10.900	54209	15	4.184	16.496	54281*	34	12.368	20.718	54353	14	18.649	25.957
54066*	34	14.886	5.800	54138	13	19.398	10.444	54210	29	4.468	16.422	54282	28	13.660	20.449				
54067	22	14.990	5.730	54139	16	20.732	10.380	54211	30	16.179	16.675	54283	21	16.718	20.949				
54068	16	15.443	5.316	54140*	47	23.290	10.436	54212	13	16.974	16.316	54284	20	19.067	20.556				
54069	36	19.985	5.954	54141	33	23.354	10.462	54213	31	17.520	16.586	54285	15	21.058	20.406				
54070	21	20.100	5.644	54142	27	23.365	10.471	54214	15	18.396	16.991	54286	12	23.410	20.224				
54071*	31	1.415	6.782	54143	12	3.460	11.420	54215	11	18.986	16.831	54287	18	3.095	21.803				
54072*	37	1.518	6.848	54144	26	4.250	11.323	54216	34	19.762	16.600	54288	27	3.388	21.905				
54073	32	4.494	6.960	54145	13	4.612	11.347	54217	12	24.326	16.700	54289	19	7.305	21.520				
54074	23	7.436	6.616	54146	12	6.252	11.364	54218	34	3.185	17.972	54290	33	8.524	21.568				
54075	10	8.506	6.028	54147	12	8.378	11.407	54219*	35	6.327	17.324	54291	12	8.756	21.548				
54076	24	10.790	6.150	54148	31	12.110	11.614	54220	21	6.826	17.362	54292	13	11.458	21.506				
54077*	51	13.714	6.000	54149	16	13.853	11.146	54221	18	7.202	17.878	54293*	43	13.382	21.463				
54078	22	14.448	6.807	54150	25	16.155	11.318	54222	16	7.880	17.175	54294	10	15.085	21.295				
54079*	49	15.222	6.959	54151	19	17.418	11.012	54223	10	9.615	17.220	54295	14	16.008	21.752				
54080	12	17.137	6.951	54152	21	18.598	11.154	54224	15	10.638	17.760	54296	10	17.658	21.640				
54081	10	19.450	6.890	54153	30	19.718	11.840	54225*	35	12.216	17.987	54297	29	18.544	21.899				
54082	10	20.620	6.775	54154	19	20.876	11.950	54226	11	12.524	17.262	54298	30	20.215	21.400				
54083	19	21.578	6.740	54155	10	20.940	11.824	54227	31	13.166	17.366	54299	16	22.234	21.619				
54084	12	24.304	6.222	54156	15	22.163	11.188	54228	21	13.284	17.126	54300	12	22.508	21.392				
54085	12	24.320	6.846	54157	12	22.492	11.550	54229	14	13.623	17.799	54301	34	23.888	21.893				
54086	18	25.196	6.632	54158	31	24.418	11.286	54230	28	13.686	17.364	54302*	41	24.801	21.739				
54087	12	25.695	6.650	54159	17	4.068	12.267	54231	30	14.766	17.830	54303	21	1.852	22.093				
54088	34	1.572	7.384	54160	18	4.880	12.868	54232	30	17.265	17.054	54304	19	2.799	22.034				
54089	10	3.442	7.661	54161	16	5.057	12.209	54233	19	17.266	17.405	54305	13	4.104	22.065				
54090	13	6.150	7.700	54162	11	6.227	12.713	54234	15	17.442	17.807	54306	18	4.446	22.578				
54091*	55	6.778	7.250	54163*	40	7.116	12.176	54235	12	17.490	17.654	54307	19	7.120	22.260				
54092	10	7.814	7.908	54164	13	10.089	12.646	54236	29	17.594	17.558	54308	28	7.882	22.130				
54093*	46	7.954	7.356	54165	32	11.900	12.688	54237	26	23.600	17.494	54309	14	8.334	22.114				
54094	27	11.074	7.910	54166	25	14.842	12.126	54238	25	25.746	17.617	54310	12	8.782	22.046				
54095	13	15.016	7.966	54167	12	15.123	12.607	54239	12	3.264	18.250	54311	13	10.787	22.020				
54096	32	16.432	7.334	54168	21	5.595	13.064	54240	26	3.504	18.104	54312	16	10.870	22.067				
54097	18	17.090	7.358	54169	13	5.952	13.238	54241	14	3.630	18.766	54313	14	10.882	22.061				
54098	32	17.444	7.913	54170	11	6.828	13.880	54242	25	4.450	18.205	54314	28	15.462	22.115				
54099	15	20.434	7.206	54171	12	8.120	13.740	54243	31	5.137	18.038	54315	11	15.925	22.862				
54100	20	21.016	7.666	54172*	42	11.708	13.221	54244*	42	7.850	18.958	54316	16	21.801	22.254				
54101	35	0.344	8.546	54173	13	14.620	13.979	54245	26	9.454	18.234	54317	30	22.402	22.154				
54102	20	3.772	8.986	54174	14	15.274	13.936	54246	23	13.820	18.719	54318	10	23.402	22.116				
54103	12	6.035	8.446	54175	21	18.520	13.718	54247	12	16.020	18.945	54319	22	25.560	22.220				
54104	10	8.364	8.106	54176	12	19.574	13.670	54248*	40	22.188	18.198	54320	28	25.763	22.954				
54105	21	9.648	8.785	54177	16	19.620	13.719	54249	30	23.048	18.084	54321	29	4.615	23.476				
54106	30	11.756	8.145	54178	34	21.767	13.047	54250	17	23.065	18.174	54322	12	5.474	23.976				
54107	18	12.421	8.807	54179*	39	23.758	13.350	54251	33	0.332	19.950	54323	22	8.245	23.156				
54108	12	13.677	8.330	54180	16	25.188	13.991	54252*	32	0.844	19.384	54324*	33	9.816	23.460				
54109	13	13.762	8.750	54181	31	0.900	14.148	54253	33	2.782	19.633	54325*	31	11.047	23.734				
54110	22	13.864	8.280	54182	18	1.582	14.816	54254	31	4.396	19.805	54326	33	13.786	23.434				
54111	12	14.335	8.293	54183	12	2.770	14.646	54255	25	5.535	19.432	54327	32	14.380	23.516				
54112	36	16.253	8.206	54184	17	2.934	14.900	54256	11	6.361	19.549	54328	13	15.942	23.858				
54113	28	17.146	8.796	54185	14	3.756	14.136	54257	12	7.425	19.834	54329	20	15.962	23.210				
54114	27	18.124	8.294	54186	23	5.626	14.757	54258	13	8.514	19.331	54330	36	18.084	23.591				
54115	32	23.348	8.352	54187	17	6.594	14.145	54259	34	9.165	19.534	54331*	38	20.028	23.226				
54116	12	23.576	8.460	54188	12	8.198	14.076	54260	10	9.974	19.741	54332*	38	23.938	23.585				
54117	30	0.146	9.916	54189	36	15.600	14.016	54261	12	10.464	19.493	54333*	27	24.104	23.763				
54118	31	1.104	9.894	54190	19	18.386	14.290	54262	21	11.016	19.470	54334	26	24.135	23.342				
54119	14	5.088	9.019	54191	12	22.223	14.748	54263	18	12.882	19.899	54335	31	2.106	24.262				
54120	12	8.726	9.336	54192	25	23.076	14.960	54264*	38	13.700	19.480	54336	13	9.730	24.484				
54121	18	11.928	9.500	54193	10	23.862	14.304	54265	11	17.165	19.462	54337	26	10.090	24.987				
54122	32	14.261	9.560	54194	14	24.082	14.698	54266	12	17.479	19.840	54338	28	17.102	24.760				
54123*	27	14.266	9.860	54195	10	0.237	15.482	54267	20	17.502	19.034	54339	12	17.808	24.890				
54124	18	15.718	9.156	54196	12	0.758	15.424	54268*	44	18.013	19.510	54340							



54439	26	8.798	2.052	54511	26	2.943	6.716	54583	14	15.650	9.806	54655	16	13.540	13.060	54727	21	15.664	16.198
54440	33	13.376	2.076	54512	24	3.444	6.724	54584	16	18.172	9.148	54656	24	13.896	13.891	54728	19	15.758	16.986
54441	18	15.710	2.845	54513	15	4.376	6.070	54585	17	20.047	9.356	54657	40	13.906	13.903	54729	25	17.328	16.974
54442	16	15.743	2.887	54514	21	5.106	6.428	54586	44	25.894	9.521	54658	18	14.798	13.880	54730	18	19.288	16.654
54443	15	16.838	2.264	54515	12	5.956	6.488	54587	13	0.750	10.375	54659	25	14.914	13.326	54731	18	23.820	16.752
54444	22	17.662	2.295	54516	11	6.770	6.482	54588*	66	1.090	10.546	54660	16	17.860	13.047	54732	10	23.960	16.585
54445*	56	19.800	2.025	54517	11	6.846	6.725	54589	38	1.155	10.568	54661	10	17.894	13.268	54733	17	1.057	17.668
54446	12	20.030	2.912	54518	24	8.258	6.023	54590	27	1.166	10.578	54662	22	19.520	13.050	54734	26	1.500	17.598
54447	20	21.231	2.884	54519*	91	10.807	6.006	54591	21	6.413	10.876	54663	32	21.594	13.306	54735	24	3.648	17.692
54448	13	25.538	2.612	54520	12	12.961	6.240	54592	30	7.034	10.145	54664	20	23.230	13.188	54736	15	4.444	17.918
54449	14	0.428	3.014	54521	12	13.008	6.536	54593	19	7.278	10.918	54665	17	0.088	14.870	54737	10	5.472	17.978
54450	22	2.140	3.762	54522	15	13.958	6.968	54594	35	14.180	10.456	54666	17	1.718	14.406	54738	24	8.222	17.254
54451	10	2.832	3.523	54523	11	14.315	6.879	54595	28	15.140	10.364	54667	24	1.944	14.795	54739	25	9.742	17.524
54452	27	4.624	3.744	54524	12	14.534	6.094	54596	26	15.211	10.836	54668	20	3.037	14.075	54740	12	11.240	17.731
54453	15	5.742	3.456	54525	32	16.075	6.699	54597	11	16.192	10.348	54669	34	8.698	14.206	54741	13	12.594	17.580
54454	13	9.514	3.245	54526	23	16.626	6.832	54598	26	16.930	10.216	54670	11	8.761	14.794	54742*	65	13.548	17.558
54455	27	9.852	3.182	54527	16	17.190	6.528	54599	22	17.022	10.159	54671	21	9.952	14.420	54743	28	15.386	17.690
54456	29	10.454	3.226	54528	11	18.042	6.334	54600	15	18.100	10.966	54672	16	10.223	14.652	54744	40	15.912	17.981
54457	13	10.522	3.104	54529	12	18.957	6.984	54601	13	18.540	10.598	54673	12	11.326	14.331	54745*	58	16.310	17.564
54458	16	10.710	3.485	54530	12	21.596	6.574	54602	23	20.054	10.228	54674	28	11.799	14.066	54746	25	16.540	17.376
54459	12	12.139	3.592	54531	15	22.818	6.164	54603	12	20.770	10.009	54675	12	13.540	14.831	54747*	78	18.398	17.811
54460	21	14.784	3.064	54532	20	25.076	6.326	54604	12	21.125	10.584	54676	14	14.042	14.073	54748*	40	18.430	17.114
54461	17	14.904	3.272	54533	20	10.488	7.742	54605	16	23.944	10.114	54677	21	16.444	14.275	54749	19	18.602	17.456
54462	30	14.962	3.337	54534	23	12.515	7.602	54606	21	25.236	10.843	54678	14	16.950	14.064	54750	18	19.152	17.562
54463	12	15.427	3.444	54535	30	12.737	7.902	54607	14	0.312	11.672	54679	18	17.450	14.656	54751	24	19.340	17.204
54464	11	18.032	3.347	54536	33	17.298	7.196	54608	12	1.623	11.720	54680	16	18.024	14.958	54752	11	19.372	17.944
54465	12	18.184	3.980	54537	11	17.640	7.303	54609	26	2.230	11.380	54681	12	19.318	14.353	54753	13	19.405	17.858
54466	16	20.064	3.358	54538	16	18.176	7.638	54610	20	5.755	11.362	54682	40	19.460	14.158	54754	14	24.152	17.136
54467	21	22.740	3.918	54539	23	19.147	7.632	54611	24	6.270	11.274	54683	17	20.429	14.457	54755	56	0.097	18.321
54468*	42	24.984	3.183	54540	11	19.750	7.668	54612	14	7.864	11.864	54684	22	20.771	14.992	54756	16	0.926	18.852
54469	11	25.160	3.132	54541*	70	19.896	7.025	54613	11	8.650	11.188	54685	23	20.808	14.946	54757	33	0.958	18.196
54470	35	0.704	4.950	54542	12	21.450	7.092	54614	14	9.689	11.588	54686	12	21.101	14.836	54758	23	0.976	18.287
54471	14	1.241	4.298	54543	12	21.841	7.814	54615	15	9.752	11.576	54687	20	21.531	14.824	54759	20	2.916	18.212
54472	14	3.580	4.674	54544	11	22.815	7.608	54616	17	10.430	11.776	54688	13	24.480	14.885	54760	16	4.080	18.527
54473	13	4.266	4.706	54545*	46	24.610	7.520	54617*	40	11.272	11.958	54689	26	0.942	15.073	54761	23	5.826	18.834
54474*	58	4.274	4.486	54546	36	1.119	8.463	54618	20	11.590	11.408	54690	24	2.660	15.764	54762	10	6.176	18.322
54475	16	4.614	4.642	54547	10	1.344	8.562	54619	17	11.810	11.210	54691	16	3.886	15.791	54763	22	7.382	18.470
54476	11	5.530	4.981	54548	13	3.454	8.402	54620	20	13.822	11.553	54692	30	4.274	15.774	54764	21	8.282	18.649
54477	10	5.771	4.208	54549	15	3.958	8.228	54621	11	14.052	11.600	54693	14	5.587	15.886	54765	11	9.760	18.787
54478	14	6.670	4.308	54550	12	5.070	8.364	54622	17	15.476	11.178	54694	26	8.250	15.768	54766*	50	9.780	18.078
54479	18	8.424	4.508	54551	17	5.701	8.016	54623	23	16.872	11.536	54695	13	8.441	15.820	54767	33	10.092	18.714
54480*	44	9.896	4.456	54552	15	9.704	8.391	54624	14	17.886	11.765	54696	15	8.705	15.923	54768	24	11.266	18.931
54481	19	10.348	4.474	54553	18	10.428	8.634	54625	29	18.318	11.157	54697	41	9.181	15.046	54769	11	14.550	18.205
54482*	45	14.678	4.776	54554	17	10.618	8.865	54626	29	23.590	11.566	54698	15	9.217	15.356	54770	27	19.234	18.332
54483	10	16.186	4.020	54555	20	12.890	8.884	54627	18	24.928	11.856	54699	18	9.238	15.094	54771	16	19.354	18.202
54484	13	16.834	4.554	54556	17	13.138	8.231	54628	13	0.575	12.886	54700	14	10.886	15.068	54772	23	0.156	19.710
54485	11	17.836	4.026	54557	20	15.186	8.228	54629	18	1.464	12.114	54701*	56	12.271	15.268	54773	24	0.460	19.626
54486	11	18.652	4.676	54558	11	15.794	8.436	54630	18	3.770	12.666	54702	18	15.680	15.840	54774	11	2.236	19.918
54487	10	19.470	4.418	54559	10	16.070	8.655	54631*	60	4.904	12.336	54703	24	15.700	15.704	54775	12	3.922	19.351
54488	18	20.345	4.795	54560	16	16.884	8.252	54632	30	7.148	12.452	54704	13	17.546	15.631	54776	24	4.322	19.495
54489	15	20.766	4.748	54561	25	17.335	8.788	54633	11	7.358	12.053	54705	48	18.248	15.530	54777	14	4.472	19.822
54490	36	21.710	4.390	54562	11	17.945	8.288	54634	36	8.902	12.414	54706	20	18.920	15.629	54778	35	4.952	19.344
54491	13	25.309	4.952	54563	24	18.298	8.694	54635	11	9.050	12.828	54707	15	19.014	15.100	54779*	44	7.549	19.763
54492	14	0.073	5.654	54564	26	18.351	8.722	54636*	76	10.150	12.531	54708	14	22.112	15.915	54780	26	8.308	19.814
54493*	37	3.874	5.336	54565	30	18.494	8.907	54637	11	10.896	12.324	54709	29	23.390	15.130	54781	28	8.948	19.224
54494	18	4.060	5.192	54566	14	21.775	8.016	54638	20	14.268	12.812	54710	12	1.150	16.575	54782	23	9.454	19.342
54495	16	6.814	5.412	54567	15	22.431	8.930	54639	12	15.466	12.026	54711	22	2.217	16.794	54783	11	9.800	19.328
54496	26	8.178	5.222	54568	18	24.216	8.704	54640	24	16.208	12.061	54712	10	3.328	16.860	54784	14	11.157	19.942
54497	14	11.896	5.900	54569	12	24.447	8.865	54641	22	16.308	12.742	54713	15	3.340	16.136	54785	20	11.216	19.972
54498	15	12.682	5.326	54570	11	25.530	8.247	54642	14	16.600	12.096	54714	10	3.414	16.599	54786	25	12.416	19.206
54499	22	13.550	5.128	54571	22	0.790	9.896	54643	19	19.300	12.172	54715	27	4.121	16.875	54787	27	13.438	19.813
54500	15	14.934	5.289	54572	22	4.208	9.864	54644	16	19.938	12.298	54716	10	4.296	16.378	54788	18	13.438	19.548
54501	12	17.156	5.624	54573	45	5.242	9.968	546											



54799	44	6.744	20.692	54871	29	1.346	24.657	54963	28	20.999	1.914	55035	13	4.526	8.993	55107	10	12.584	13.738
54800	12	8.396	20.372	54872	16	1.508	24.602	54964	28	21.105	1.372	55036	33	5.923	8.962	55108*	40	20.109	13.410
54801	12	8.932	20.493	54873	16	2.321	24.668	54965	25	23.742	1.176	55037	22	7.466	8.913	55109	11	21.679	13.162
54802	30	11.294	20.277	54874	10	3.372	24.227	54966	17	4.676	2.719	55038	29	7.860	8.182	55110	14	5.199	14.206
54803	23	11.706	20.552	54875	16	4.816	24.124	54967	31	5.054	2.025	55039	31	8.724	8.066	55111	27	13.461	14.765
54804	16	13.310	20.334	54876	22	5.184	24.304	54968	13	7.300	2.355	55040	25	12.296	8.654	55112	30	15.129	14.380
54805	10	14.683	20.740	54877*	31	6.004	24.349	54969	12	11.490	2.852	55041	24	16.248	8.668	55113	23	15.152	14.770
54806	10	15.483	20.324	54878	14	6.092	24.644	54970	19	18.100	2.264	55042	34	16.941	8.096	55114	24	15.237	14.872
54807	29	16.015	20.373	54879	10	6.718	24.120	54971	25	20.163	2.488	55043	29	16.951	8.180	55115	21	15.639	14.654
54808	11	17.791	20.664	54880	28	6.821	24.273	54972*	43	25.073	2.324	55044	38	17.108	8.768	55116	13	15.844	14.533
54809	11	19.872	20.768	54881*	42	6.992	24.192	54973*	43	2.552	3.732	55045*	60	18.742	8.670	55117	26	16.300	14.445
54810	12	24.430	20.376	54882	14	8.102	24.362	54974	12	3.102	3.154	55046	33	19.731	8.672	55118	19	17.126	14.569
54811	20	0.196	21.744	54883	27	9.696	24.499	54975	32	4.144	3.671	55047	38	22.038	8.760	55119	32	18.014	14.503
54812	18	0.467	21.513	54884	22	10.070	24.620	54976	17	6.638	3.748	55048	39	22.950	8.172	55120	32	20.386	14.884
54813	10	1.626	21.200	54885	18	10.840	24.920	54977	11	9.106	3.836	55049	29	23.600	8.026	55121	30	20.442	14.606
54814	30	1.849	21.994	54886	21	12.842	24.092	54978	10	13.236	3.214	55050	11	0.054	9.504	55122	14	24.420	14.356
54815*	60	2.760	21.826	54887	20	14.308	24.180	54979	23	14.829	3.206	55051	12	1.836	9.264	55123*	48	24.970	14.412
54816*	55	5.968	21.922	54888	20	17.505	24.250	54980	19	20.904	3.282	55052	12	3.765	9.590	55124	33	1.073	15.694
54817	11	6.623	21.250	54889	34	19.078	24.530	54981	20	25.013	3.288	55053	20	6.775	9.412	55125	10	2.158	15.438
54818	13	9.440	21.377	54890	28	19.714	24.235	54982	20	25.172	3.042	55054	12	6.952	9.410	55126	12	5.719	15.779
54819	40	9.830	21.374	54891	47	22.174	24.396	54983*	56	25.322	3.396	55055	34	12.030	9.316	55127	27	8.098	15.060
54820	29	10.642	21.014	54892	46	22.550	24.703	54984	24	25.771	3.889	55056	12	13.372	9.602	55128	30	9.128	15.188
54821	22	11.168	21.134	54893	10	22.898	24.346	54985	20	0.316	4.489	55057	12	13.384	9.236	55129	27	11.082	15.801
54822	21	12.546	21.429	54894	15	1.188	25.946	54986	12	3.748	4.086	55058	12	13.480	9.012	55130	21	11.284	15.354
54823	41	16.210	21.216	54895	12	1.203	25.644	54987	14	7.894	4.437	55059	20	15.195	9.226	55131	19	14.758	15.544
54824	15	16.758	21.077	54896	23	6.390	25.542	54988	12	10.650	4.355	55060	23	18.826	9.375	55132	12	19.938	15.573
54825	16	16.848	21.701	54897	13	7.118	25.206	54989	21	10.744	4.400	55061	25	21.418	9.976	55133	18	20.641	15.184
54826	18	18.482	21.765	54898	19	7.731	25.720	54990	21	12.404	4.270	55062	25	23.004	9.046	55134	13	23.516	15.612
54827	20	18.690	21.949	54899	33	11.386	25.858	54991	12	14.226	4.664	55063	13	1.580	10.674	55135*	43	5.641	16.996
54828*	54	21.351	21.464	54900	27	12.778	25.029	54992*	40	14.294	4.218	55064*	37	3.523	10.061	55136*	36	6.610	16.012
54829	17	22.730	21.744	54901	13	13.060	25.810	54993	37	14.700	4.009	55065*	39	4.932	10.120	55137	22	8.048	16.818
54830	14	24.128	21.378	54902	36	14.228	25.200	54994	23	14.793	4.416	55066	36	6.754	10.975	55138	12	11.501	16.363
54831	36	0.370	22.275	54903	12	14.450	25.391	54995	35	15.972	4.090	55067	23	9.498	10.888	55139	15	12.924	16.754
54832	13	1.059	22.931	54904	24	21.060	25.354	54996	16	16.730	4.908	55068*	41	10.035	10.076	55140	28	14.205	16.783
54833	14	1.369	22.222	54905	26	24.517	25.522	54997*	38	18.702	4.110	55069	30	10.464	10.220	55141	12	14.800	16.262
54834	24	3.527	22.298	54906	28	24.985	25.091	54998	34	4.740	5.968	55070	15	14.906	10.370	55142	26	15.280	16.501
54835	18	6.604	22.298					54999	10	5.740	5.342	55071	14	21.981	10.175	55143	33	15.378	16.646
54836	13	7.475	22.414					55000	33	5.900	5.556	55072	25	2.880	11.388	55144	36	16.702	16.427
54837*	52	8.174	22.110					55001	11	6.556	5.598	55073	32	4.660	11.748	55145	33	20.118	16.865
54838	15	9.550	22.707					55002*	59	10.700	5.647	55074	33	7.820	11.358	55146*	44	22.315	16.142
54839	11	9.752	22.753					55003	12	11.574	5.769	55075	36	13.888	11.345	55147*	37	24.492	16.262
54840	14	14.873	22.430					55004*	34	14.672	5.680	55076	10	14.346	11.310	55148	15	4.065	17.770
54841	31	16.237	22.904					55005	28	15.348	5.368	55077	12	14.924	11.179	55149	12	8.188	17.640
54842	27	16.454	22.770					55006	36	17.040	5.314	55078	32	17.370	11.702	55150	29	10.556	17.318
54843	21	17.328	22.326					55007	26	19.220	5.546	55079	11	17.573	11.991	55151	15	12.264	17.906
54844*	47	17.533	22.220					55008	16	21.802	5.282	55080	14	17.808	11.880	55152*	36	14.744	17.090
54845	26	17.962	22.452					55009	26	24.437	5.106	55081	34	18.141	11.000	55153	25	15.185	17.754
54846	15	18.585	22.626					55010	12	0.416	6.732	55082	16	18.220	11.075	55154	30	15.800	17.898
54847	37	18.849	22.462					55011	23	1.056	6.124	55083	21	18.676	11.042	55155	13	20.400	17.842
54848	15	22.167	22.243					55012	12	2.675	6.875	55084*	41	19.262	11.470	55156	38	22.252	17.154
54849	17	22.736	22.872					55013*	55	4.616	6.226	55085	27	21.631	11.526	55157	12	22.979	17.594
54850	36	23.599	22.288					55014	30	7.137	6.334	55086	34	25.240	11.876	55158	38	24.256	17.338
54851	32	23.762	22.970					55015	32	9.408	6.567	55087	33	1.238	12.130	55159	46	25.867	17.361
54852	23	24.595	22.740					55016	20	9.970	6.580	55088	13	2.580	12.404	55160	32	7.736	18.196
54853*	60	1.926	23.685					55017	33	12.106	6.887	55089	12	11.121	12.555	55161	27	11.225	18.337
54854*	28	2.096	23.862					55018	12	12.454	6.919	55090	33	14.830	12.138	55162	22	16.364	18.250
54855	27	2.122	23.438					55019	35	19.775	6.460	55091	10	15.047	12.618	55163	36	16.554	18.881
54856	28	3.742	23.028					55020	32	20.595	6.438	55092	22	16.665	12.403	55164	18	17.062	17.177
54857	32	4.446	23.052					55021	28	6.416	7.676	55093*	67	17.094	12.675	55165*	46	18.360	18.196
54858	11	5.176	23.656					55022	18	11.734	7.022	55094	15	17.937	12.370	55166	16	18.864	18.566
54859	26	8.924	23.222					55023	12	12.028	7.084	55095	37	21.970	12.057	55167	36	19.343	18.100
54860	23	11.704	23.769					55024	33	13.017	7.584	55096	14	22.996	12.463	55168	21	7.592	19.036
54861	18	12.506	23.686					55025	23	16.379	7.166	55097	14	24.984	12.106	55169	12	9.844	19.076
54862	16	12.930	23.046					55026	30	18.297	7.174	55098	12	25.406	12.339	55170	43	20.389	19.844
54863	20	15.089	23.348					55027	25	19.528	7.694	55099	16	0.894	13.754	55171	34	21.988	19.888
54864	17	18.504	23.396					55028	15	19.997	7.748	55							



55179	36	14.758	20.321	<div>R.A. 19<sup>h</sup> 48<sup>m</sup></div> <div>Plate 1278; 1918 Oct. 29.</div> <div>Provisional Constants.</div> <div>A            B            C</div> <div>—01733 +00657 —0541</div> <div>D            E            F</div> <div>—00630 —01749 —2672</div> <div>Mag.=16.8—1.09√d</div>	55306	37	20.256	4.633	55378	11	24.586	9.146	55450	17	5.144	15.215
55180	21	19.774	20.386		55307	11	20.634	4.761	55379	13	0.684	10.956	55451	25	5.554	15.898
55181	12	20.460	20.736		55308	34	25.394	4.826	55380	32	3.602	10.012	55452*	93	8.343	15.998
55182	36	23.502	20.569		55309	14	2.400	5.545	55381	13	10.274	10.916	55453	31	10.442	15.128
55183	10	1.874	21.932		55310	32	5.614	5.126	55382	16	15.036	10.498	55454	36	15.046	15.170
55184	12	3.876	21.696		55311	13	8.920	5.576	55383	19	20.250	10.986	55455	34	15.284	15.738
55185	26	5.194	21.219		55312	10	11.408	5.778	55384	22	2.570	11.848	55456	31	15.846	15.695
55186	19	5.794	21.419		55313*	41	13.482	5.015	55385	35	2.825	11.615	55457	28	19.840	15.574
55187	34	6.912	21.291		55314	34	13.976	5.886	55386	19	4.068	11.834	55458	23	20.896	15.668
55188	20	8.836	21.521		55315	11	15.807	5.030	55387	26	4.646	11.657	55459	22	22.156	15.022
55189	23	10.293	21.408	55316	14	19.034	5.416	55388	12	5.150	11.394	55460*	36	2.124	16.010	
55190	13	18.073	21.438	55317	38	20.224	5.045	55389	10	5.500	11.767	55461	13	4.684	16.246	
55191	23	21.166	21.063	55318	13	2.785	6.374	55390	13	6.282	11.649	55462	14	5.694	16.220	
55192	32	1.354	22.852	55319	22	4.676	6.856	55391	28	7.696	11.314	55463	23	8.258	16.922	
55193	16	5.426	22.466	55320	32	9.454	6.222	55392	32	10.418	11.962	55464	10	11.354	16.324	
55194	31	8.864	22.327	55321	10	10.155	6.442	55393	19	12.554	11.504	55465	16	12.570	16.150	
55195	26	9.300	22.935	55322	33	10.801	6.214	55394	12	12.946	11.258	55466	21	17.634	16.032	
55196	37	11.173	22.125	55323	12	11.636	6.184	55395	12	13.874	11.595	55467	15	20.040	16.866	
55197	18	11.646	22.137	55324	23	13.503	6.823	55396	12	18.356	11.512	55468	18	20.636	16.912	
55198	23	13.054	22.031	55325	12	15.437	6.803	55397	14	21.469	11.546	55469	21	22.288	16.156	
55199	33	14.754	22.732	55326*	39	21.245	6.642	55398	13	21.504	11.180	55470	39	22.834	16.930	
55200	34	17.844	22.962	55327	23	21.251	6.108	55399	15	22.558	11.587	55471	13	25.465	16.172	
55201	18	18.720	22.747	55328	10	22.352	6.417	55400*	43	25.202	11.068	55472	19	0.624	17.356	
55202	23	24.046	22.156	55329	29	23.130	6.864	55401	21	0.584	12.226	55473	37	1.899	17.086	
55203*	36	0.897	23.926	55330	24	24.488	6.972	55402	13	2.996	12.074	55474*	45	3.507	17.094	
55204	32	1.526	23.529	55331	28	25.887	6.198	55403	30	4.331	12.718	55475	14	4.921	17.539	
55205	25	2.356	23.289	55332	29	0.290	7.660	55404	18	5.246	12.561	55476*	48	6.660	17.974	
55206	12	7.036	23.435	55333	39	0.496	7.936	55405	12	5.804	12.995	55477	34	8.200	17.092	
55207	39	8.974	23.351	55334	24	1.144	7.784	55406*	40	7.660	12.936	55478	31	9.584	17.696	
55208	33	9.229	23.375	55335	14	2.169	7.118	55407*	41	8.768	12.846	55479	15	14.183	17.826	
55209	34	9.243	23.922	55336	25	3.489	7.092	55408	13	10.697	12.334	55480	13	15.642	17.479	
55210	21	9.908	23.180	55337	17	4.346	7.675	55409	14	12.696	12.736	55481	12	20.966	17.139	
55211	26	10.464	23.742	55338*	38	5.952	7.392	55410	11	15.937	12.978	55482	34	22.051	17.312	
55212	33	11.406	23.636	55339	12	6.406	7.250	55411*	43	16.205	12.758	55483	15	22.370	17.312	
55213	18	17.366	23.338	55340*	60	9.390	7.736	55412	15	16.572	12.066	55484	33	22.480	17.080	
55214	18	18.324	23.460	55341	32	9.555	7.846	55413	11	17.076	12.640	55485	10	24.875	17.960	
55215	15	18.694	23.914	55342	12	11.211	7.854	55414	20	17.869	12.060	55486	20	25.944	17.888	
55216	36	19.824	23.253	55343	13	12.099	7.446	55415	35	25.094	12.242	55487	13	0.336	18.141	
55217	16	25.184	23.008	55344	15	13.716	7.772	55416	12	25.615	12.366	55488	18	0.784	18.481	
55218	15	3.436	24.455	55345	26	17.585	7.408	55417	12	0.386	13.444	55489*	40	3.756	18.854	
55219	17	3.824	24.506	55346	10	18.580	7.895	55418	10	1.406	13.734	55490	16	3.807	18.822	
55220	23	5.974	24.668	55347	33	19.632	7.734	55419	10	4.805	13.721	55491	32	4.158	18.672	
55221	12	7.506	24.476	55348	32	19.928	7.852	55420	16	11.046	13.736	55492	13	5.186	18.714	
55222	15	7.816	24.792	55349	11	21.255	7.207	55421	30	14.072	13.678	55493	17	6.912	18.592	
55223	36	8.560	24.386	55350	29	22.685	7.216	55422	10	16.548	13.630	55494	33	9.196	18.514	
55224	10	8.916	24.625	55351*	41	24.748	7.146	55423	16	17.620	13.220	55495	11	10.676	18.088	
55225	34	9.952	24.935	55352	23	0.560	8.812	55424	13	18.725	13.936	55496*	39	11.078	18.605	
55226*	100	14.454	24.640	55353	12	3.544	8.862	55425	11	21.315	13.119	55497	17	13.974	18.905	
55227	16	17.215	24.062	55354	10	6.166	8.798	55426	19	21.642	13.958	55498	29	16.457	18.118	
55228	19	17.665	24.636	55355	10	7.086	8.254	55427	17	21.896	13.278	55499	22	16.966	18.788	
55229	40	18.416	24.906	55356	12	9.206	8.586	55428	28	22.117	13.784	55500	34	17.084	18.850	
55230	12	23.296	24.189	55357	30	15.107	8.924	55429*	43	22.752	13.696	55501*	82	17.236	18.960	
55231	37	0.332	25.276	55358	29	15.594	8.331	55430	31	23.306	13.848	55502	11	17.279	18.738	
55232	32	2.769	25.638	55359	12	16.491	8.885	55431	11	0.306	14.662	55503	25	18.280	18.155	
55233	18	4.724	25.722	55360	30	17.132	8.998	55432	12	0.327	14.322	55504	14	18.504	18.246	
55234	17	5.325	25.576	55361	19	17.954	8.850	55433	11	1.976	14.324	55505	19	19.024	18.064	
55235	33	5.508	25.182	55362	12	19.826	8.356	55434	24	2.032	14.104	55506	18	19.404	18.732	
55236	20	14.527	25.808	55363*	36	21.725	8.004	55435*	46	2.577	14.155	55507	27	21.736	18.046	
55237*	38	15.259	25.592	55364	24	23.544	8.936	55436	26	4.149	14.470	55508	27	24.585	18.632	
55238*	45	16.266	25.339	55365	27	25.169	8.086	555								



55522	14	10.613	20.424	55594	12	8.784	25.984	55692	12	18.063	5.900	55764	11	24.914	12.842	55836	14	24.952	20.210
55523	10	11.035	20.804	55595	37	9.016	25.864	55693	13	21.320	5.220	55765	12	25.082	12.484	55837	16	8.836	21.787
55524	13	13.320	20.742	55596	12	11.518	25.520	55694	14	22.927	5.650	55766	14	25.527	12.685	55838	13	9.482	21.601
55525	12	13.751	20.518	55597	32	11.565	25.432	55695	16	3.702	6.450	55767	28	0.683	13.987	55839	15	9.704	21.517
55526	10	14.455	20.265	55598	20	13.197	25.879	55696*	31	4.728	6.392	55768	12	6.792	13.109	55840	23	11.626	21.474
55527*	40	14.936	20.902	55599	20	14.864	25.674	55697	28	5.550	6.550	55769	16	9.561	13.496	55841	11	15.704	21.220
55528	25	15.735	20.777	55600	12	14.886	25.222	55698	21	7.265	6.632	55770	16	15.058	13.765	55842	16	16.100	21.562
55529	14	17.705	20.364	55601	24	16.694	25.622	55699	10	12.208	6.546	55771	10	17.112	13.406	55843	11	16.761	21.892
55530	12	21.414	20.162	55602	30	18.579	25.805	55700*	28	15.780	6.560	55772	12	17.878	13.366	55844	12	16.978	21.910
55531	10	22.115	20.230	55603	26	19.875	25.985	55701*	32	15.894	6.030	55773*	27	18.820	13.302	55845	16	18.550	21.476
55532	13	1.202	21.252	55604	12	22.325	25.869	55702*	27	15.920	6.646	55774*	52	22.080	13.112	55846	26	21.469	21.900
55533	13	1.291	21.562					55703	13	16.060	6.235	55775	16	0.052	14.084	55847	14	22.569	21.814
55534	26	1.738	21.908					55704*	55	17.016	6.856	55776	17	1.242	14.131	55848*	67	25.380	21.602
55535	10	6.556	21.794					55705	14	18.690	6.931	55777	13	5.522	14.650	55849*	32	0.976	22.044
55536	22	7.844	21.794					55706	15	0.520	7.514	55778	10	7.608	14.018	55850	12	2.523	22.125
55537	10	10.368	21.442					55707	17	0.959	7.156	55779	19	8.382	14.892	55851	23	5.650	22.078
55538	18	10.517	21.830					55708	14	2.316	7.243	55780	13	9.670	14.950	55852*	40	6.088	22.884
55539	28	13.604	21.404					55709*	36	2.576	7.414	55781	11	15.704	14.314	55853	12	8.454	22.285
55540	39	14.022	21.344					55710	15	5.160	7.566	55782	12	17.505	14.644	55854	18	12.182	22.577
55541	13	16.094	21.307					55711*	37	9.983	7.412	55783	10	19.180	14.021	55855	14	15.041	22.681
55542	13	16.661	21.226					55712	21	11.380	7.470	55784	10	20.792	14.402	55856	15	16.478	22.052
55543	15	17.746	21.690					55713	14	14.727	7.185	55785	17	21.337	14.665	55857	19	17.116	22.803
55544*	42	22.922	21.759					55714	18	18.114	7.325	55786	10	22.155	14.542	55858	22	20.692	22.348
55545	14	24.466	21.863					55715	13	19.954	7.242	55787	12	0.110	15.323	55859	20	22.178	22.610
55546	17	2.238	22.360					55716	10	22.210	7.098	55788	15	4.664	15.210	55860	19	23.094	22.004
55547	12	2.284	22.398					55717	14	24.318	7.106	55789*	29	18.142	15.294	55861	12	3.092	23.816
55548	30	2.886	22.748					55718	15	3.013	8.350	55790	12	19.144	15.816	55862	14	3.512	23.380
55549	39	5.351	22.866					55719*	50	4.024	8.521	55791	16	19.530	15.016	55863	18	11.598	23.288
55550	16	6.716	22.431					55720	24	4.844	8.159	55792	12	0.256	16.453	55864	17	13.320	23.193
55551	12	7.692	22.414					55721	11	12.980	8.478	55793	10	3.429	16.426	55865	11	16.245	23.766
55552	19	7.778	22.776					55722	11	16.572	8.319	55794	11	6.314	16.592	55866	20	23.972	23.734
55553	11	8.626	22.698					55723	11	17.309	8.824	55795	26	9.532	16.438	55867	24	24.266	23.444
55554	12	8.734	22.110					55724	12	0.893	9.588	55796	15	10.090	16.668	55868	21	0.963	24.964
55555	10	11.145	22.854					55725	13	1.402	9.220	55797	15	13.188	16.806	55869	21	10.440	24.122
55556	12	13.298	22.804					55726	11	7.135	9.260	55798*	58	13.668	16.957	55870	27	12.300	24.402
55557	33	14.405	22.694					55727	11	12.718	9.152	55799	13	17.904	16.473	55871	17	13.509	24.690
55558	26	19.733	22.094					55728	14	13.636	9.978	55800	10	20.968	16.390	55872	12	13.976	24.296
55559	12	20.839	22.404					55729	10	15.369	9.610	55801	21	0.038	17.613	55873	10	14.554	24.732
55560*	40	21.786	22.148					55730	18	19.437	9.584	55802	10	0.360	17.606	55874	11	16.390	24.300
55561	12	1.012	23.950					55731	11	20.666	9.720	55803	20	0.464	17.376	55875	23	16.450	24.828
55562	12	6.942	23.920					55732	17	25.456	9.252	55804	29	0.816	17.220	55876	11	3.190	25.018
55563*	51	7.408	23.686					55733	15	5.730	10.306	55805	13	10.078	17.971	55877*	58	9.515	25.902
55564	34	8.337	23.950					55734	14	6.965	10.812	55806	13	14.828	17.564	55878	13	17.906	25.626
55565	12	8.737	23.790					55735	18	9.676	10.586	55807	13	15.068	17.912	55879	24	22.535	25.143
55566	12	10.100	23.426					55736	10	10.960	10.419	55808*	33	15.561	17.236	55880	18	22.554	25.472
55567	18	10.798	23.744					55737*	70	16.155	10.424	55809	11	17.500	17.408	55881	24	22.744	25.579
55568	16	14.034	23.570					55738	18	16.849	10.175	55810	15	2.590	18.894				
55569	15	20.876	23.338					55739	24	22.158	10.891	55811	15	3.936	18.130				
55570	12	23.364	23.695					55740	11	25.225	10.672	55812	17	6.008	18.628				
55571	12	25.006	23.566					55741	10	0.460	11.889	55813	13	17.400	18.023				
55572	21	25.436	23.134					55742*	39	3.090	11.326	55814	10	21.921	18.120				
55573	15	1.058	24.739					55743	12	4.566	11.709	55815	23	21.932	18.850				
55574	11	1.476	24.756					55744	17	6.754	11.110	55816	14	1.746	19.882				
55575	27	5.456	24.697					55745	21	8.496	11.246	55817	15	5.635	19.188				
55576	33	6.170	24.246					55746	13	8.620	11.377	55818	24	5.866	19.458				
55577	19	6.915	24.836					55747	12	12.718	11.306	55819	13	7.254	19.045				
55578	10	10.714	24.202					55748	11	13.716	11.932	55820	12	7.714	19.690				
55579*	38	11.417	24.196					55749	21	14.640	11.390	55821	14	10.810	19.246				
55580	10	12.071	24.443					55750	14	15.430	11.370	55822	14	12.604	19.297				
55581	12	12.506	24.740					55751	19	20.830	11.558	55823	15	13.539	19.351				
55582	10	15.931	24.204					55752	15	23.362	11.330	55824	20	14.086	19.158				
55583	14	16.038	24.473					55753	20	3.000	12.500	55825	19	15.627	19.400				
55584	19	16.814	24.066					55754	10	3.522	12.618	55826	11	18.319	19.037				
55585	12	18.256	24.145					55755	20	4.601	12.513	55827	26	2.356	20.220				
55586	24	18.296	24.442					55756	22	10.347	12.828	55828	12	10.712	20.170				
55587	28	19.150	24.026					55757	10	14.636	12.408	55829	12	13.928	20.912				
55588	33	22.862	24.683					55758	16	17.289	12.580	55830	14	16.332	20.843				
55589	20	25.088	24.767					55759	15	22.463	12.440	55831	23	16.903	20.710				
55590	30	1.331	25.238					55760*	36	22.572	12.370	55832	20	20.025	20.490				
55591	10	5.778	25.378					55761	17	23.472	12.050	55833	22	23.212	20.820				
55592	36	6.791	25.616					55762*	40	24.902	12.336	55834	12	24.126	20.294				
55593	20	7.176	25.436																



55907	30	12.858	0.585	55979	10	5.206	6.676	56051	28	17.546	10.850	56123	13	7.086	14.434	56195	18	18.981	18.287
55908	12	13.589	0.085	55980	10	6.600	6.305	56052	16	17.546	10.106	56124	12	8.672	14.478	56196	24	20.296	18.944
55909	14	17.283	0.376	55981*	35	8.484	6.996	56053	36	17.760	10.822	56125	15	10.927	14.610	56197	10	22.550	18.954
55910	11	18.364	0.440	55982	18	9.860	6.550	56054	12	19.021	10.622	56126	34	11.693	14.222	56198	10	24.886	18.082
55911	17	20.804	0.738	55983	10	14.712	6.229	56055	15	20.164	10.438	56127*	42	12.282	14.674	56199	12	4.636	19.412
55912	23	21.256	0.611	55984	10	15.762	6.818	56056	31	20.436	10.862	56128	28	12.628	14.524	56200*	34	6.718	19.778
55913*	42	24.796	0.324	55985	34	16.880	6.195	56057	13	21.260	10.242	56129	12	14.278	14.348	56201	34	8.078	19.675
55914	33	4.630	1.534	55986	18	19.914	6.433	56058	30	22.080	10.647	56130	29	17.530	14.052	56202	15	11.668	19.447
55915	12	5.960	1.818	55987	28	20.400	6.362	56059	12	23.280	10.330	56131	18	19.257	14.519	56203	10	12.306	19.730
55916	22	8.054	1.147	55988	11	21.811	6.354	56060	10	25.782	10.284	56132	21	21.386	14.250	56204	12	13.379	19.878
55917	13	8.938	1.640	55989	11	23.008	6.190	56061	21	0.608	11.888	56133	18	22.144	14.188	56205	16	14.718	19.161
55918	30	9.624	1.543	55990	12	0.327	7.372	56062	23	0.964	11.356	56134	17	23.050	14.652	56206	31	19.888	19.674
55919	11	10.736	1.730	55991	24	1.894	7.126	56063	29	4.844	11.874	56135	17	24.430	14.724	56207	15	20.112	19.798
55920	12	12.315	1.919	55992*	43	3.748	7.674	56064	14	6.532	11.487	56136	18	4.368	15.658	56208	13	20.738	19.214
55921	10	13.602	1.630	55993	20	6.229	7.254	56065	18	6.854	11.564	56137	19	5.400	15.453	56209	26	21.230	19.498
55922	12	14.108	1.835	55994	18	7.232	7.517	56066	19	8.865	11.444	56138	10	9.114	15.251	56210	33	21.312	19.215
55923*	37	17.174	1.975	55995	14	8.610	7.342	56067	13	14.358	11.266	56139	13	10.106	15.247	56211	18	21.568	19.428
55924	28	20.194	1.343	55996	12	10.572	7.690	56068	20	15.650	11.532	56140	10	15.369	15.419	56212	34	22.522	19.788
55925	13	23.483	1.686	55997	18	12.914	7.038	56069	31	17.319	11.642	56141	33	16.788	15.476	56213	10	23.554	19.314
55926	16	0.856	2.898	55998	31	18.494	7.359	56070	18	17.695	11.196	56142	35	19.070	15.084	56214	10	24.552	19.111
55927	31	0.888	2.269	55999*	37	20.155	7.906	56071	12	18.635	11.063	56143	14	19.795	15.672	56215	31	0.868	20.850
55928	24	1.160	2.238	56000	13	21.202	7.144	56072	31	20.404	11.489	56144	12	21.776	15.598	56216	19	1.780	20.316
55929	14	2.752	2.293	56001	14	22.604	7.916	56073	17	23.174	11.120	56145	30	22.156	15.611	56217	34	2.279	20.108
55930*	34	5.105	2.005	56002	34	23.370	7.154	56074	31	23.592	11.174	56146	12	22.572	15.634	56218	16	2.538	20.756
55931	12	5.176	2.004	56003	11	1.029	8.344	56075	31	23.811	11.117	56147	18	22.742	15.392	56219	21	2.608	20.228
55932	14	5.718	2.412	56004	13	3.608	8.270	56076	20	24.270	11.090	56148	20	23.652	15.936	56220	19	5.513	20.676
55933*	31	7.310	2.995	56005	31	5.880	8.337	56077	13	24.806	11.828	56149	20	24.876	15.920	56221	23	7.324	20.740
55934	30	11.618	2.373	56006	27	9.186	8.565	56078	15	24.950	11.103	56150	33	25.586	15.510	56222	13	8.255	20.488
55935	10	12.334	2.686	56007	20	11.788	8.576	56079	23	0.067	12.472	56151	15	4.659	16.567	56223	13	8.391	20.622
55936	12	12.746	2.392	56008*	62	12.728	8.144	56080	37	0.176	12.403	56152	23	5.071	16.234	56224	10	9.963	20.974
55937	16	14.426	2.674	56009	10	14.028	8.264	56081	27	1.076	12.076	56153	30	5.224	16.729	56225	10	11.260	20.633
55938	23	15.348	2.232	56010	29	16.186	8.909	56082*	40	2.506	12.354	56154	34	5.389	16.739	56226	26	11.535	20.968
55939	15	21.810	2.298	56011	16	17.478	8.598	56083	34	2.516	12.608	56155	16	6.210	16.222	56227*	48	11.566	20.724
55940	10	22.225	2.518	56012	17	20.340	8.653	56084	19	2.526	12.858	56156	18	10.590	16.480	56228	13	13.952	20.316
55941*	28	0.446	3.998	56013	18	21.686	8.065	56085	21	2.690	12.498	56157	20	11.800	16.763	56229*	60	14.697	20.354
55942	17	4.686	3.314	56014	19	22.524	8.638	56086	22	3.135	12.699	56158	23	11.940	16.952	56230	27	15.255	20.544
55943	13	8.358	3.356	56015*	39	23.575	8.524	56087	15	3.784	12.804	56159	24	14.947	16.214	56231	32	21.500	20.424
55944	10	8.908	3.295	56016	15	23.866	8.654	56088	16	3.853	12.694	56160*	37	21.482	16.978	56232	19	22.401	20.316
55945	13	8.991	3.636	56017*	47	23.912	8.938	56089	18	4.974	12.106	56161	15	22.415	16.602	56233	21	25.196	20.052
55946	20	9.524	3.079	56018	18	25.642	8.347	56090	14	7.902	12.561	56162	17	24.503	16.112	56234	25	25.886	20.986
55947	12	10.919	3.398	56019	10	0.569	9.367	56091	11	10.624	12.872	56163	31	25.435	16.442	56235	24	0.230	21.848
55948	10	12.150	3.718	56020	10	2.184	9.516	56092	13	19.821	12.260	56164	10	4.242	17.398	56236	12	1.964	21.508
55949	18	12.457	3.824	56021	28	3.044	9.266	56093	30	21.122	12.912	56165	26	8.464	17.176	56237	17	2.665	21.641
55950	26	17.710	3.796	56022	12	3.481	9.383	56094*	45	21.302	12.570	56166	10	9.979	17.606	56238	10	2.974	21.114
55951	16	20.618	3.231	56023	26	4.230	9.223	56095	12	23.818	12.687	56167	19	11.760	17.929	56239*	59	3.035	21.617
55952	30	21.656	3.216	56024	12	4.272	9.100	56096	15	24.465	12.742	56168	23	12.720	17.868	56240	12	3.337	21.744
55953	17	3.450	4.078	56025	14	4.481	9.756	56097	23	24.538	12.624	56169	14	17.400	17.692	56241	34	5.266	21.098
55954	15	3.814	4.322	56026	28	5.316	9.638	56098	19	25.406	12.094	56170	29	17.595	17.463	56242	12	5.326	21.975
55955	33	4.691	4.635	56027	10	8.177	9.585	56099	10	25.580	12.635	56171	29	18.494	17.606	56243	14	8.549	21.808
55956	21	5.154	4.652	56028	18	13.262	9.462	56100	10	25.615	12.629	56172	14	20.050	17.338	56244	15	8.688	21.132
55957	10	9.452	4.225	56029	12	14.986	9.780	56101	18	3.870	13.180	56173	19	20.256	17.798	56245*	34	10.071	21.990
55958*	38	10.226	4.366	56030	12	15.604	9.124	56102	15	4.934	13.342	56174	19	20.517	17.481	56246	26	11.044	21.264
55959	21	12.850	4.174	56031	15	16.103	9.076	56103	33	4.967	13.366	56175	22	22.530	17.278	56247	16	14.470	21.232
55960	12	15.122	4.898	56032	11	17.761	9.024	56104	18	5.874	13.600	56176	23	22.590	17.444	56248	10	15.107	21.365
55961	17	15.229	4.462	56033	18	19.309	9.170	56105	17	6.127	13.290	56177	10	25.591	17.792	56249	20	15.828	21.018
55962	12	15.640	4.222	56034	19	19.660	9.486	56106	18	6.516	13.506	56178	13	2.310	18.524	56250	11	17.166	21.914
55963	14	17.532	4.589	56035	23	20.714	9.067	56107	18	7.217	13.836	56179	20	3.920	18.476	56251	21	17.636	21.030
55964	11	23.850	4.069	56036	12	20.926	9.198	56108*	90	8.568	13.524	56180	34	4.188	18.092	56252	10	17.986	21.420
55965	24	0.495	5.677	56037	13	22.436	9.528	56109	34	13.388	13.710	56181	24	5.755	18.738	56253	12	19.238	21.813
55966	12	0.500	5.046	56038	17	23.068	9.658	56110	22	15.676	13.083	56182	29	6.060	18.600	56254	11	20.215	21.706
55967	12	8.845	5.878	56039	10	23.655	9.876	56111	10	16.896	13.824	56183*	35	7.456	18.174	56255	32	20.736	21.855
55968	18	9.478	5.892	56040	17	2.820	10.686	56112	10	20.135	13.706	56184	18	10.124	18.674	56256	16	21.651	21.620
55969	23	10.446	5.138	56041	13	4.122	10.600												



56267	12	12.860	22.116	<b>R.A. 20<sup>h</sup> 12<sup>m</sup></b> Plate 1263; 1918 Aug. 27. <i>Provisional Constants.</i> A            B            C -01710 +00989 -0092 D            E            F -00996 -01723 -2364 $Mag.=15.8-1.09\sqrt{d}$	56406	24	3.956	6.840	56478	19	12.190	14.458	56550	14	14.803	21.991
56268	18	14.284	22.200		56407	10	7.055	6.912	56479	17	12.357	14.770	56551	15	16.137	21.548
56269	30	17.272	22.251		56408	17	9.410	6.197	56480	13	15.430	14.624	56552	14	17.376	21.727
56270	15	17.708	22.850		56409	16	11.022	6.742	56481	12	15.549	14.832	56553	11	21.722	21.813
56271	12	18.795	22.028		56410*	32	13.476	6.768	56482	13	17.526	14.800	56554	25	22.415	21.049
56272	10	19.280	22.758		56411	16	13.503	6.578	56483	28	21.742	14.849	56555	12	4.068	22.754
56273	29	22.076	22.171		56412	10	16.920	6.710	56484	20	21.994	14.060	56556	21	5.592	22.464
56274	12	1.166	23.022		56413*	53	21.660	6.112	56485	20	24.563	14.961	56557	23	6.550	22.788
56275	29	1.650	23.762		56414	25	0.967	7.347	56486	21	24.570	14.945	56558*	25	8.194	22.450
56276	30	1.942	23.469		56415*	28	6.329	7.611	56487	19	3.320	15.665	56559	14	10.750	22.808
56277	15	2.744	23.799		56416	11	8.315	7.758	56488*	40	7.173	15.028	56560	10	12.490	22.980
56278	20	7.639	23.874		56417*	62	13.596	7.380	56489	14	8.374	15.656	56561	19	15.781	22.887
56279	15	10.702	23.074		56418	13	14.910	7.634	56490	12	19.020	15.784	56562*	30	17.219	22.829
56280	12	11.955	23.996		56419	13	19.010	7.186	56491	10	19.688	15.714	56563	13	18.213	22.962
56281	30	12.472	23.597		56420	13	24.312	7.590	56492	13	20.836	15.113	56564	17	18.740	22.066
56282	34	13.746	23.410		56421*	36	1.191	8.712	56493	23	22.380	15.226	56565*	26	20.429	22.478
56283	18	14.397	23.222		56422	11	3.258	8.500	56494	15	25.654	15.560	56566	15	25.782	22.531
56284*	34	16.925	23.602		56423	22	5.090	8.663	56495	17	3.184	16.600	56567	27	4.205	23.693
56285	27	18.773	23.492		56424	12	7.884	8.150	56496	17	6.000	16.198	56568	18	13.544	23.126
56286	10	20.073	23.889		56425	12	8.878	8.910	56497	18	12.043	16.084	56569	14	18.778	23.140
56287	11	20.894	23.878		56426	13	8.884	8.688	56498	19	14.041	16.468	56570	14	19.036	23.526
56288	17	20.965	23.276		56427	11	11.290	8.698	56499	17	18.100	16.813	56571*	56	20.458	23.696
56289	14	21.265	23.911		56428	15	13.122	8.528	56500	10	22.860	16.606	56572	26	20.668	23.700
56290	10	3.162	24.708		56429*	36	15.672	8.100	56501*	29	23.460	16.968	56573*	34	21.780	23.642
56291	10	4.320	24.776		56430	15	16.300	8.467	56502	12	23.825	16.640	56574	25	21.800	23.248
56292	12	6.317	24.978		56431	14	17.216	8.530	56503	11	23.920	16.500	56575	11	25.786	23.450
56293*	39	7.289	24.996		56432*	50	22.026	8.100	56504	13	24.064	16.746	56576	15	1.920	24.743
56294	19	7.452	24.344		56433	25	24.966	8.270	56505	18	25.551	16.590	56577	18	4.760	24.552
56295	13	9.131	24.559		56434*	48	1.533	9.120	56506	14	0.357	17.650	56578	11	7.049	24.924
56296	27	9.209	24.614		56435	16	6.788	9.540	56507	12	7.843	17.710	56579	11	7.985	24.494
56297	11	9.490	24.553		56436	23	9.662	9.082	56508	17	10.154	17.420	56580	12	8.618	24.344
56298	30	10.348	24.625		56437	13	9.866	9.496	56509	13	12.050	17.060	56581	14	8.876	24.648
56299	10	11.584	24.239		56438*	67	10.784	9.367	56510	10	15.882	17.508	56582	10	9.174	24.492
56300	13	13.302	24.065		56439	10	15.225	9.590	56511*	80	17.462	17.462	56583	22	9.194	24.804
56301	23	14.601	24.652		56440	25	17.226	9.674	56512*	26	17.469	17.644	56584	20	10.936	24.530
56302	17	17.258	24.145		56441	18	19.975	9.936	56513	21	18.582	17.240	56585	18	13.995	24.213
56303	15	17.708	24.146		56442*	38	21.840	9.922	56514	24	19.700	17.944	56586*	30	15.224	24.274
56304	31	18.198	24.825		56443	10	24.328	9.580	56515*	28	21.490	17.262	56587	17	16.756	24.677
56305	28	18.230	24.040		56444	11	8.527	10.798	56516	20	22.056	17.961	56588	17	20.250	24.872
56306	15	19.386	24.829		56445	11	13.366	10.770	56517	20	22.450	17.832	56589	18	22.614	24.130
56307	39	21.244	24.914		56446	12	20.857	10.188	56518	13	25.231	17.208	56590	16	22.821	24.352
56308	12	22.420	24.977		56447*	28	22.759	10.826	56519*	45	4.428	18.540	56591	20	2.522	25.764
56309	11	22.895	24.655		56448	19	25.505	10.577	56520	14	8.314	18.990	56592	27	13.018	25.340
56310	12	23.805	24.645		56449	11	0.834	11.314	56521	14	8.430	18.216	56593	16	15.122	25.095
56311	29	24.036	24.563		56450	15	1.253	11.364	56522	18	16.589	18.439	56594	14	16.531	25.304
56312	24	24.140	24.068		56451	18	1.472	11.300	56523	27	21.571	18.942	56595	16	16.539	25.306
56313	30	0.220	25.180		56452	13	1.930	11.270	56524	23	0.326	19.994	56596	48	25.950	25.298
56314	23	0.242	25.508		56453	13	6.834	11.250	56525	12	7.188	19.118	<b>R.A. 20<sup>h</sup> 20<sup>m</sup></b> Plate 1291; 1918 Dec. 4. <i>Provisional Constants.</i> A            B            C -01809 +00678 +0358 D            E            F -00590 -01781 -1884 $Mag.=15.8-1.09\sqrt{d}$			
56315	29	0.430	25.613		56454	21	9.072	11.220	56526	14	8.452	19.822				
56316	12	1.584	25.501		56455	13	9.307	11.356	56527	20	8.994	19.342				
56317	12	3.073	25.380		56456	21	11.794	11.762	56528	24	9.845	19.070				
56318	14	3.702	25.884		56457	23	20.048	11.168	56529	13	11.064	19.812				
56319*	36	3.962	25.012		56458	26	20.998	11.688	56530	14	11.133	19.950				
56320	11	6.202	25.734		56459	21	24.428	11.144	56531	12	11.460	19.631				
56321	31	7.786	25.174		56460	10	25.344	11.290	56532	10	11.622	19.634				
56322	13	8.276	25.293		56461	12	2.222	12.800	56533*	36	11.738	19.372				
56323	12	8.424	25.020		56462	19	5.501	12.402	56534*	41	14.906	19.480				
56324	28	10.626	25.048		56463	16	9.807	12.836	56535	21	20.220	19.781				
56325	14	12.234	25.984		56464	15	21.481	12.552	56536	11	22.888	19.910				
56326	13	12.279	25.052		56465*	37	22.214	12.947	56537	12	4.344	20.817				
56327	12	12.730	25.990		56466	51	25.772	12.410	56538	22	4.347	20.040				
56328	14	14.179	25.404		56467	20	4.136	13.685	56539	12	6.142	20.344				
56329	10	14.916	25.561		56468	12	5.077	13.972	56540	20	10.650	20.886				
56330	20	15.658	25.584		56469	24	6.024	13.010	56541	23	10.714	20.652				
56331	17	17.451	25.500		56470	17	7.184	13.915	56542	28	15.117	20.482				
56332	17	18.316	25.118		56471	14	15.770	13.736	56543	21	22.293	20.018				
56333	13	18.858	25.306		56472	18	17.914	13.602	56544	15	24.479	20.060				
56334	15	19.144	25.931		56473	10	18.038	13.908	56545	14	1.508	21.978				
56335	19	21.654	25.963		56474	12	21.132	13.277	56546	13	3.710	21.136				
56336	21	21.965	25.214		56475	20	23.614	13.530	56547	15	4.745	21.538				
56337	32	24.619	25.592		56476	17	8.806	14.360	56548	12	5.862	21.503				
					56477	11	9.269	14.222	56549	14	9.369	21.233				



56605	15	10-840	0-348	56677	14	21-182	8-169	56749	17	8-890	16-346	56821*	34	10-184	24-706	56885	12	11-226	3-179
56606	27	11-761	0-028	56678	18	24-086	8-333	56750	23	9-401	16-084	56822	23	12-244	24-380	56886	11	11-494	3-525
56607	13	13-063	0-102	56679	17	4-815	9-894	56751	12	13-530	16-354	56823*	30	13-396	24-830	56887	22	14-910	3-886
56608	18	5-416	1-211	56680	13	5-094	9-550	56752	16	13-826	16-152	56824*	28	16-666	24-967	56888	12	15-472	3-630
56609*	31	12-575	1-392	56681	20	8-716	9-854	56753	16	14-255	16-358	56825	20	17-190	24-491	56889	22	16-692	3-982
56610	30	12-614	1-068	56682	17	18-238	9-642	56754	17	14-666	16-812	56826*	33	20-932	24-522	56890	27	18-671	3-366
56611*	30	12-648	1-840	56683	11	18-740	9-974	56755	15	14-823	16-148	56827	32	22-322	24-904	56891	12	19-531	3-373
56612	14	14-647	1-248	56684*	31	19-983	9-485	56756	17	16-626	16-576	56828	18	22-475	24-932	56892	13	19-680	3-270
56613	12	24-395	1-551	56685	17	20-026	9-376	56757	33	17-522	16-461	56829	38	3-752	25-542	56893	12	19-849	3-390
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56615*	20	3-698	2-492	56687	24	25-034	9-515	56759	30	20-502	16-900	56831	19	24-826	25-188	56895	22	2-610	4-014
56616	18	7-654	2-532	56688	26	3-186	10-834	56760	10	22-465	16-170	56832	10	25-116	25-036	56896	11	4-012	4-258
56617*	33	10-770	2-750	56689	21	6-780	10-278	56761	21	23-195	16-072	56833	11	25-262	25-308	56897	22	9-092	4-060
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56619	27	15-016	2-546	56691	10	10-874	10-277	56763	14	1-798	17-008					56899	31	15-226	4-121
56620	18	15-291	2-166	56692*	44	13-334	10-248	56764	16	2-966	17-460					56900	16	15-407	4-602
56621	10	15-681	2-066	56693*	36	17-048	10-838	56765	19	5-277	17-375					56901	10	18-588	4-567
56622*	34	16-498	2-076	56694	12	22-658	10-504	56766	25	7-305	17-386					56902*	48	18-903	4-422
56623*	83	21-664	2-388	56695	11	23-371	10-368	56767	30	11-715	17-896					56903	15	20-650	4-990
56624	10	24-951	2-960	56696*	34	0-446	11-102	56768	16	11-857	17-618					56904	10	21-670	4-574
56625	32	10-798	3-205	56697	24	2-115	11-408	56769	11	13-024	17-632					56905	25	22-796	4-018
56626	18	12-555	3-606	56698	16	16-724	11-996	56770	21	14-849	17-934					56906	14	23-028	4-858
56627	26	12-651	3-691	56699	35	16-830	11-126	56771	18	23-340	17-860					56907	14	23-045	4-060
56628	16	14-984	3-563	56700	33	17-241	11-736	56772*	41	23-989	17-475					56908	25	24-391	4-676
56629	22	19-770	3-224	56701	18	17-796	11-459	56773	22	0-196	18-107					56909	15	1-160	5-894
56630	14	20-000	3-392	56702	16	19-583	11-219	56774	10	2-189	18-032					56910	22	2-094	5-514
56631*	52	22-069	3-096	56703	14	23-082	11-940	56775	27	7-018	18-256					56911	30	3-080	5-240
56632	19	22-252	3-149	56704*	56	24-436	11-508	56776	28	12-068	18-089					56912	24	5-718	5-592
56633	18	24-958	3-112	56705*	65	24-500	11-470	56777*	42	14-616	18-144					56913*	60	6-282	5-826
56634	21	25-126	3-778	56706	21	25-142	11-283	56778	18	15-346	18-144					56914	13	7-374	5-518
56635	18	6-978	4-637	56707*	39	3-469	12-666	56779	31	17-190	18-368					56915	16	9-496	5-784
56636	28	7-973	4-734	56708	12	8-912	12-464	56780	10	17-234	18-023					56916	13	15-416	5-054
56637	14	8-450	4-820	56709*	35	11-000	12-815	56781	11	24-043	18-070					56917	30	20-472	5-269
56638	12	9-718	4-206	56710	12	15-374	12-393	56782	15	25-155	18-756					56918	10	20-880	5-480
56639*	36	20-385	4-371	56711	10	16-909	12-794	56783	12	25-940	19-236					56919	13	21-500	5-020
56640	22	21-702	4-553	56712	29	24-946	12-485	56784	14	15-771	19-242					56920*	27	21-508	5-426
56641	12	2-084	5-568	56713	22	1-322	13-798	56785	26	0-056	20-294					56921	22	4-576	6-770
56642	19	3-029	5-690	56714	16	6-561	13-881	56786	18	2-239	20-318					56922*	40	7-493	6-504
56643	12	5-239	5-617	56715*	31	7-816	13-155	56787	17	7-356	20-122					56923	13	7-502	6-085
56644	23	6-140	5-633	56716*	34	9-518	13-646	56788	14	10-600	20-905					56924	11	12-188	6-082
56645	31	7-780	5-887	56717	18	11-534	13-234	56789	14	17-496	20-446					56925	27	20-330	6-720
56646	15	11-334	5-573	56718	10	3-242	14-214	56790	14	19-436	20-632					56926	18	20-365	6-636
56647	25	12-380	5-858	56719	21	4-040	14-154	56791	30	19-614	20-278					56927	20	20-701	6-916
56648*	32	18-824	5-223	56720	31	9-327	14-819	56792	13	21-292	20-413					56928	11	21-787	6-567
56649	19	24-590	5-271	56721	22	9-645	14-874	56793	29	23-524	20-831					56929	13	21-896	6-620
56650	26	25-578	5-012	56722	12	9-744	14-399	56794	28	0-187	21-322					56930	22	23-586	6-634
56651	13	2-018	6-158	56723	14	15-502	14-826	56795	19	4-008	21-044					56931	12	25-472	6-256
56652	32	8-208	6-860	56724	12	15-652	14-192	56796	27	7-290	21-380					56932	12	25-686	6-828
56653	30	8-301	6-389	56725*	37	15-909	14-544	56797	23	8-210	21-542					56933	38	1-096	7-462
56654	12	10-444	6-146	56726	12	18-701	14-598	56798*	32	9-204	21-476					56934	10	2-456	7-546
56655	10	11-802	6-696	56727	12	19-022	14-800	56799*	44	11-012	21-456					56935	36	4-461	7-524
56656	13	17-310	6-522	56728	10	20-538	14-417	56800	13	11-442	21-258					56936	15	5-934	7-778
56657	17	17-628	6-216	56729	24	23-128	14-426	56801	22	15-710	21-551					56937	12	7-892	7-720
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56659	12	1-976	7-854	56731	26	0-102	15-500	56803	16	18-335	21-841					56939	15	14-516	7-600
56660	22	5-447	7-656	56732	26	2-283	15-222	56804	30	21-394	21-800					56940	20	18-946	7-491
56661*	36	6-800	7-085	56733	25	2-288	15-206	56805	26	23-817	21-583					56941	12	22-723	7-616
56662	12	12-278	7-649	56734	17	3-378	15-812	56806	17	3-562	22-780					56942	23	0-352	8-129
56663	22	16-216	7-248	56735	23	4-688	15-364	56807*	32	5-724	22-569					56943	24	1-629	8-582
56664*	88	17-317	7-060	56736	14	12-665	15-721	56808	30	7-916	22-516					56944	31	5-394	8-252
56665	12	18-356	7-983	56737	13	16-317	15-491	56809	18	11-366	22-200					56945	10	7-074	8-648
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56667	32	23-568	7-204	56739	26	20-922	15-036	56811	17	16-248	22-182					56947	12	10-339	8-972
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56669*	40	5-598	8-578	56741	29	23-631	15-062	56813	11	18-724	22-604					56949	11	11-660	8-202
56670	30	8-053	8-554	56742	14	24-010	15-512	56814	32	20-325	22-664					56950	10	13-663	8-028
56671*	32	8-614	8-843	56743	25	25-764	15-004	56815	11	22-859	22-304					56951	17	15-380	8-678
56672	27	11-231	8-192	56744	15	3-283	16-842	56816	30	24-252	22-908					56952*	37	17-025	8-006
56673*	35	14-716	8-888	5674															



56957	13	4.536	9.689	57029	17	10.357	13.003	57101	15	1.714	18.320	57173	27	1.998	23.154	57271	13	9.868	2.450
56958	17	5.025	9.303	57030	13	13.506	13.404	57102	20	2.841	18.987	57174	18	6.741	23.476	57272	18	10.000	2.962
56959	15	5.784	9.766	57031	13	15.916	13.026	57103	11	3.302	18.500	57175	22	8.538	23.391	57273*	47	10.932	2.720
56960	13	6.058	9.779	57032	12	16.496	13.540	57104	18	4.772	18.772	57176	12	9.092	23.041	57274	20	11.692	2.794
56961	12	9.145	9.528	57033	20	17.763	13.825	57105*	40	5.230	18.128	57177	28	9.208	23.113	57275	23	16.022	2.608
56962*	30	12.502	9.502	57034	14	18.167	13.024	57106	17	7.374	18.644	57178	40	9.784	23.442	57276	36	17.730	2.439
56963	22	13.042	9.847	57035	10	18.220	13.776	57107	23	7.789	18.322	57179	22	11.712	23.876	57277	36	20.199	2.488
56964	31	13.392	9.870	57036	21	20.123	13.554	57108	18	10.800	18.206	57180	14	15.176	23.450	57278*	35	4.540	3.517
56965	12	16.610	9.848	57037	18	22.352	13.450	57109	19	10.972	18.199	57181	12	19.242	23.036	57279	14	10.238	3.204
56966	11	18.071	9.106	57038	10	24.228	13.064	57110	32	13.013	18.145	57182	11	20.334	23.018	57280*	40	13.744	3.718
56967	18	19.717	9.578	57039	24	0.754	14.689	57111	11	17.086	18.710	57183	40	25.438	23.270	57281	29	16.200	3.852
56968	20	21.570	9.944	57040	14	2.223	14.536	57112	25	18.600	18.994	57184	18	7.003	24.602	57282	31	20.252	3.324
56969	24	22.681	9.440	57041	20	11.171	14.154	57113	20	20.392	18.540	57185	32	10.335	24.134	57283	29	0.636	4.334
56970	10	23.106	9.714	57042	18	13.166	14.745	57114	12	21.632	18.030	57186	18	12.091	24.666	57284	28	2.243	4.974
56971	12	0.231	10.774	57043	14	14.366	14.107	57115	33	21.808	18.355	57187	19	14.584	24.308	57285	15	4.925	4.955
56972	13	0.940	10.628	57044	24	16.274	14.153	57116	11	23.930	18.774	57188	24	15.262	24.783	57286	26	5.612	4.625
56973	18	2.097	10.051	57045	26	17.518	14.242	57117	12	5.680	19.851	57189	15	17.199	24.376	57287	22	7.306	4.140
56974	25	7.132	10.835	57046	23	18.184	14.550	57118*	35	9.022	19.894	57190	29	18.609	24.651	57288	14	7.700	4.907
56975	14	8.914	10.762	57047	15	21.801	14.348	57119	22	13.044	19.616	57191	28	23.080	24.330	57289	14	10.724	4.410
56976	15	9.872	10.418	57048	11	21.980	14.347	57120	14	14.162	19.146	57192	20	24.548	24.068	57290	10	11.747	4.793
56977	12	10.505	10.536	57049*	40	24.173	14.015	57121	10	18.351	19.414	57193	34	0.093	25.177	57291*	41	12.316	4.875
56978	20	12.527	10.142	57050*	51	25.254	14.217	57122	13	19.498	19.000	57194	21	0.246	25.204	57292	30	16.106	4.447
56979	12	13.687	10.398	57051	22	0.383	15.652	57123	36	19.731	19.824	57195	25	2.600	25.426	57293	33	16.464	4.299
56980	11	13.824	10.328	57052	23	1.262	15.316	57124	10	21.549	19.104	57196	12	3.044	25.542	57294	21	16.466	4.346
56981	21	15.587	10.455	57053	14	1.650	15.756	57125	18	21.702	19.780	57197	51	3.221	25.498	57295	33	16.614	4.858
56982	12	16.108	10.450	57054	20	3.255	15.098	57126	14	22.348	19.130	57198	15	17.150	25.010	57296	20	16.834	4.024
56983	13	18.114	10.316	57055	24	3.396	15.230	57127	13	22.819	19.012	57199	10	18.244	25.390	57297	10	17.262	4.168
56984	12	18.490	10.898	57056	25	5.500	15.304	57128*	43	23.190	19.626	57200	24	22.084	25.482	57298	18	20.598	4.928
56985	22	19.250	10.508	57057	11	11.916	15.122	57129	11	0.714	20.727					57299*	34	3.894	5.766
56986	14	19.424	10.712	57058	20	14.106	15.594	57130	19	7.064	20.270					57300	17	5.345	5.091
56987	27	19.460	10.398	57059	34	15.205	15.790	57131	22	7.587	20.236					57301	21	7.082	5.010
56988	14	20.594	10.100	57060	20	16.651	15.254	57132	25	7.974	20.482					57302	29	8.911	5.814
56989	20	24.211	10.247	57061	18	17.304	15.586	57133	30	8.537	20.562					57303	19	14.899	5.086
56990	10	24.951	10.706	57062	14	18.238	15.243	57134	30	8.968	20.658					57304	28	19.924	5.400
56991*	64	2.014	11.754	57063	35	20.100	15.940	57135	12	9.816	20.668					57305	12	20.708	5.197
56992*	80	2.074	11.714	57064	12	22.045	15.700	57136	20	9.884	20.164					57306	33	22.784	5.365
56993	22	2.724	11.518	57065	14	22.220	15.658	57137	30	10.196	20.054					57307	30	23.440	5.290
56994	10	6.518	11.588	57066	19	25.764	15.804	57138*	38	10.902	20.222					57308	27	1.455	6.942
56995	12	6.949	11.369	57067	12	0.109	16.438	57139	25	12.908	20.398					57309*	80	8.356	6.764
56996	10	7.325	11.364	57068	22	0.844	16.334	57140	14	12.919	20.142					57310*	65	15.676	6.420
56997	10	7.557	11.326	57069	12	4.436	16.177	57141*	47	14.020	20.016					57311	13	16.158	6.150
56998	22	9.942	11.644	57070	16	6.369	16.094	57142	12	16.848	20.484					57312	10	3.561	7.110
56999	11	12.439	11.552	57071	12	6.664	16.379	57143	12	17.629	20.392					57313	22	8.764	7.589
57000	13	13.591	11.506	57072	13	7.314	16.988	57144	22	17.838	20.290					57314	30	9.850	7.595
57001	17	13.988	11.192	57073	20	7.462	16.170	57145	20	19.797	20.570					57315	29	11.470	7.212
57002	18	17.937	11.620	57074	11	8.004	16.776	57146	13	21.140	20.866					57316*	36	18.022	7.812
57003	13	19.810	11.790	57075	18	8.644	16.634	57147	28	1.234	21.086					57317	13	19.185	7.338
57004	20	19.984	11.595	57076	28	11.535	16.309	57148	25	1.542	21.835					57318	27	20.050	7.055
57005	12	21.361	11.761	57077	14	11.894	16.778	57149*	55	4.616	21.928					57319	23	4.766	8.217
57006	22	23.940	11.602	57078	13	15.648	16.718	57150	20	5.838	21.448					57320	32	10.766	8.964
57007	18	0.674	12.200	57079	14	16.377	16.121	57151	22	9.559	21.230					57321	12	11.757	8.871
57008	25	2.544	12.722	57080	14	17.436	16.820	57152	24	11.481	21.068					57322	30	13.870	8.146
57009	11	3.420	12.098	57081	20	19.417	16.077	57153	18	11.688	21.702					57323	34	15.636	8.111
57010	12	3.633	12.707	57082	19	19.787	16.534	57154*	60	14.823	21.310					57324	32	17.425	8.080
57011	24	7.933	12.275	57083	20	20.152	16.266	57155	29	15.481	21.562					57325	14	19.256	8.180
57012	18	8.157	12.534	57084	11	1.458	17.686	57156	14	16.733	21.113					57326	31	19.580	8.045
57013	14	8.196	12.426	57085*	47	1.650	17.725	57157	22	17.184	21.580					57327*	39	24.980	8.716
57014	32	8.903	12.844	57086	12	3.667	17.072	57158	30	17.255	21.882					57328	25	0.579	9.761
57015	16	11.700	12.990	57087	24	4.592	17.980	57159	13	20.118	21.370					57329	13	8.960	9.164
57016	12	15.592	12.102	57088	24	5.064	17.552	57160	22	20.391	21.004					57330	34	12.268	9.270
57017	14	16.146	12.930	57089	12	5.148	17.286	57161	40	22.175	21.920					57331	24	18.548	9.482
57018	22	17.598	12.374	57090	24	10.464	17.210	57162	12	23.729	21.027					57332	14	20.174	9.397
57019	23	19.031	12.283	57091	12	10.999	17.037	57163	20	25.952	21.998					57333	17	20.273	9.840
57020	12	19.320	12.344	57092	15	12.934	17.738	57164	13	0.594	22.566					57334	14	20.581	9.367
57021	20	20.098	12.463	57093	23	15.918	17.638	57165	23	7.010	22.828					57335	14	20.964	9.663
57022	24	20.268	12.042	57094*	31	17.390	17.732	57166	20	8.004	22.105					57336	15	2.124	10.548
57023	17	23.432	12.496	57095	24	17.466	17.305	57167	16										



57343	30	18.648	10.846	57415	28	3.186	18.170	57487	27	2.616	24.366	57582*	43	16.157	2.335	57654	10	2.538	9.932
57344	15	20.612	10.848	57416	10	9.112	18.331	57488*	41	7.030	24.854	57583	25	20.228	2.138	57655	31	6.516	9.326
57345	25	1.864	11.908	57417	25	9.446	18.928	57489	25	7.620	24.969	57584	19	21.368	2.297	57656	30	7.547	9.481
57346	24	4.854	11.115	57418	13	12.425	18.205	57490	26	7.986	24.882	57585	10	3.916	3.648	57657	11	9.058	9.209
57347*	37	9.812	11.590	57419	34	16.035	18.554	57491	19	22.730	24.608	57586	14	6.916	3.043	57658	10	9.066	9.233
57348	9	11.692	11.841	57420*	41	18.032	18.273	57492	22	0.168	25.814	57587	11	13.175	3.591	57659	24	9.482	9.707
57349	11	19.168	11.800	57421	24	18.316	18.325	57493	11	1.771	25.566	57588	20	20.010	3.780	57660	13	11.816	9.650
57350	16	19.397	11.370	57422	33	20.730	18.134	57494	11	4.346	25.047	57589	18	21.648	3.902	57661	19	12.270	9.189
57351	23	19.582	11.106	57423	31	21.055	18.642	57495	11	5.326	25.462	57590	24	21.659	3.149	57662	30	14.406	9.435
57352	16	1.365	12.806	57424	32	22.576	18.038	57496	21	7.684	25.704	57591	24	22.557	3.014	57663	11	14.656	9.994
57353*	41	3.942	12.725	57425	10	22.630	18.552	57497	26	8.582	25.980	57592	37	23.122	3.906	57664	17	18.405	9.456
57354	13	4.455	12.890	57426	18	23.330	18.086	57498	20	9.802	25.412	57593	30	3.784	4.450	57665	24	19.547	9.123
57355	14	4.758	12.924	57427	12	23.670	18.750	57499	14	10.486	25.886	57594	16	4.436	4.338	57666	10	20.436	9.844
57356	22	6.390	12.929	57428	17	23.866	18.228	57500	21	14.456	25.900	57595	33	6.979	4.265	57667*	35	23.600	9.676
57357	20	11.949	12.824	57429*	40	24.374	18.954	57501	28	15.118	25.932	57596	32	9.571	4.004	57668	30	13.365	10.174
57358*	43	14.546	12.131	57430*	40	25.278	18.572	57502	12	18.946	25.144	57597	11	11.802	4.390	57669	12	16.510	10.019
57359*	34	18.238	12.532	57431	10	0.828	19.332	57503	12	22.780	25.662	57598	24	15.394	4.627	57670	10	17.410	10.096
57360	17	19.564	12.216	57432*	40	1.204	19.944					57599	30	17.362	4.744	57671	24	22.674	10.306
57361	13	23.194	12.196	57433	38	5.130	19.056					57600	22	19.760	4.664	57672	10	24.124	10.248
57362	20	5.830	13.778	57434	35	5.279	19.323					57601	30	0.634	5.248	57673	22	8.277	11.621
57363	29	6.164	13.386	57435	25	7.105	19.510					57602*	39	4.599	5.062	57674	10	11.484	11.198
57364	31	6.689	13.491	57436	31	11.061	19.938					57603	11	8.164	5.982	57675	24	14.960	11.270
57365	14	16.688	13.862	57437	22	15.372	19.414					57604	11	8.214	5.768	57676	13	17.326	11.696
57366	18	19.800	13.692	57438	31	15.934	19.914					57605	21	10.654	5.456	57677	34	18.712	11.634
57367	12	21.530	13.436	57439	12	17.049	19.158					57606*	55	11.511	5.528	57678	13	18.995	11.976
57368*	40	2.121	14.318	57440	15	18.224	19.482					57607	40	16.104	5.170	57679	31	19.315	11.750
57369*	45	3.204	14.508	57441	34	18.555	19.718					57608	22	17.652	5.666	57680	10	20.084	11.985
57370	13	4.462	14.682	57442	10	20.269	19.558					57609	11	19.752	5.976	57681	15	21.540	11.444
57371	13	5.498	14.412	57443	12	22.520	19.510					57610	10	21.574	5.414	57682	24	22.282	11.450
57372	34	6.669	14.344	57444	15	5.654	20.284					57611	10	4.108	6.830	57683	30	22.554	11.830
57373	35	7.606	14.068	57445*	36	6.100	20.948					57612	11	6.133	6.631	57684	32	22.849	11.219
57374*	49	10.525	14.363	57446*	43	6.196	20.220					57613	10	6.574	6.674	57685	11	25.700	11.556
57375	12	14.113	14.326	57447	31	7.531	20.892					57614	11	9.958	6.277	57686	14	0.430	12.096
57376	12	15.644	14.704	57448	13	11.446	20.451					57615	33	10.577	6.365	57687	11	3.165	12.622
57377	14	16.004	14.715	57449	18	11.526	20.962					57616	19	12.000	6.221	57688	40	4.614	12.531
57378	36	21.597	14.840	57450	18	13.151	20.776					57617	34	12.666	6.376	57689	33	5.704	12.974
57379	17	22.532	14.248	57451*	35	14.300	20.486					57618	11	12.986	6.288	57690*	48	6.051	12.362
57380	12	24.671	14.378	57452	17	14.826	20.584					57619	35	13.684	6.414	57691	23	6.560	12.674
57381	17	8.030	15.068	57453	21	15.276	20.001					57620	27	15.417	6.434	57692	11	7.977	12.963
57382	10	9.048	15.382	57454	20	15.704	20.804					57621	13	16.222	6.632	57693	10	8.445	12.332
57383	33	15.268	15.276	57455	20	16.960	20.134					57622	10	17.270	6.911	57694	10	13.487	12.124
57384	24	16.317	15.730	57456*	47	19.168	20.971					57623	20	17.871	6.000	57695	10	14.724	12.488
57385	12	19.820	15.607	57457	13	20.214	20.978					57624	11	18.224	6.674	57696	35	16.101	12.078
57386	32	20.339	15.560	57458	31	6.985	21.916					57625	10	21.444	6.147	57697	19	17.504	12.760
57387	12	21.704	15.327	57459	12	7.176	21.504					57626	22	23.880	6.357	57698	18	18.925	12.202
57388	25	25.006	15.921	57460	21	9.164	21.954					57627	12	24.446	6.041	57699	33	20.007	12.817
57389	14	3.740	16.088	57461	16	9.450	21.441					57628	13	25.544	6.016	57700	39	20.959	12.506
57390	33	4.180	16.248	57462	23	17.674	21.925					57629	11	1.531	7.578	57701	37	21.497	12.336
57391	12	5.804	16.878	57463	14	21.386	21.532					57630	29	3.504	7.183	57702	21	4.775	13.501
57392	19	12.516	16.888	57464	23	22.646	21.518					57631	30	5.986	7.099	57703	28	5.796	13.184
57393	21	12.542	16.152	57465	15	23.914	21.102					57632	12	8.528	7.670	57704	25	10.664	13.602
57394	13	18.511	16.706	57466	35	0.216	22.248					57633*	47	8.926	7.445	57705	10	12.848	13.770
57395	10	20.239	16.372	57467	23	4.000	22.280					57634*	54	8.971	7.467	57706	10	14.132	13.225
57396	24	21.338	16.110	57468	34	7.616	22.674					57635*	49	11.472	7.673	57707	11	18.588	13.354
57397	13	22.720	16.344	57469	12	11.627	22.910					57636	11	12.496	7.298	57708*	47	19.753	13.860
57398	23	23.616	16.994	57470	34	12.754	22.317					57637	11	12.576	7.598	57709	31	21.012	13.549
57399	28	24.956	16.432	57471	12	15.805	22.598					57638	16	13.576	7.154	57710	18	21.788	13.788
57400	27	25.904	16.142	57472*	42	16.496	22.664					57639*	44	15.600	7.856	57711	12	1.910	14.258
57401	15	4.655	17.192	57473	26	17.380	22.732					57640	12	16.536	7.035	57712*	40	3.512	14.564
57402	35	6.847	17.057	57474	36	17.382	22.720					57641	30	19.262	7.968	57713	11	5.116	14.616
57403	10	7.700	17.620	57475	32	17.840	22.600					57642	10	21.138	7.868	57714	10	6.361	14.353
57404	10	11.200	17.184	57476*	40	17.843	22.616					57643	11	21.776	7.864	57715	10	7.430	14.868
57405	12	11.452	17.808	57477	10	18.521	22.135					57644	12	25.326	7.184	57716	33	7.866	14.727
57406	17	12.704	17.584	57478	10	19.136	22.850					57645*	41	2.180	8.635	57717	11	8.560	14.296
57407*	42	13.100	17.600	57479*	35	3.498	23.560					57646	24	10.237	8.192	57718	10	10.814	14.366
57408	34	13.726	17.785	57480	19	5.724	23.720					57647	10	11.618	8.684	57719	16	13.694	14.731
57409	19	18.431	17.683	57481	18	9.880	23.282					57648	10	16.118	8.669	57720	11	15.746	14.724
57410*	35	21.040	17.456	57482	11	12.488	23.714					57649	25	16.244	8.445	57721	10	16.206	14.4



57726	33	23.221	14.322	57798	11	11.201	20.150	<div>R.A. 20<sup>h</sup> 52<sup>m</sup></div> <div>Plate 1297 ; 1918 Dec. 12.</div> <div>Provisional Constants.</div> <div>A            B            C</div> <div>−.01788 +.01242 +.0532</div> <div>D            E            F</div> <div>−.01173 −.01761 −.0319</div> <div>Mag.=16.3−1.09√<i>d</i></div>	57956	12	20.924	3.337	58028	13	4.894	9.282
57727	31	23.742	14.738	57799	10	14.193	20.898		57957	20	22.401	3.655	58029	32	5.538	9.150
57728	35	23.864	14.418	57800	23	15.478	20.296		57958	28	24.874	3.384	58030	16	10.612	9.703
57729	22	25.108	14.028	57801	14	16.062	20.847		57959	35	1.269	4.121	58031	24	11.661	9.388
57730	29	2.250	15.785	57802	14	16.084	20.600		57960	15	1.408	4.616	58032	16	12.760	9.434
57731	13	4.082	15.793	57803	12	25.013	20.546	57961*	74	4.892	4.473	58033	14	15.134	9.672	
57732	26	9.192	15.313	57804*	58	3.985	21.930	57962	23	8.610	4.504	58034	15	16.694	9.424	
57733	24	10.599	15.794	57805	19	7.982	21.006	57963	15	18.195	4.273	58035	15	18.280	9.530	
57734	12	18.014	15.051	57806	24	8.620	21.438	57964	34	19.808	4.057	58036	34	19.185	9.498	
57735	19	21.930	15.672	57807	27	9.688	21.804	57965	30	21.246	4.696	58037	16	19.806	9.755	
57736	21	22.424	15.750	57808	23	10.926	21.680	57966	21	21.606	4.743	58038	21	0.944	10.576	
57737	31	24.463	15.974	57809	10	11.925	21.678	57967	34	21.912	4.165	58039	15	2.402	10.489	
57738	47	25.864	15.167	57810	31	16.772	21.842	57968	28	23.547	4.566	58040	21	6.402	10.525	
57739	28	0.876	16.854	57811	33	17.016	21.841	57969	32	24.152	4.594	58041	17	6.955	10.125	
57740	28	2.205	16.292	57812	32	19.336	21.332	57970	17	24.179	4.898	58042	12	8.562	10.452	
57741	29	3.146	16.000	57813	10	19.484	21.794	57971	13	5.124	5.124	58043	19	10.114	10.537	
57742	32	6.983	16.454	57814	24	22.154	21.156	57972	19	5.202	5.669	58044	16	13.038	10.154	
57743	18	7.554	16.436	57815	17	23.780	21.531	57973	17	8.016	5.706	58045	15	18.589	10.136	
57744	12	8.467	16.248	57816	37	6.487	22.467	57974	19	14.726	5.096	58046	28	19.110	10.119	
57745	23	9.000	16.636	57817*	42	9.726	22.430	57975	17	15.700	5.124	58047	14	20.040	10.757	
57746	24	10.740	16.417	57818	14	12.174	22.082	57976	14	16.434	5.131	58048	13	21.180	10.100	
57747	38	14.870	16.582	57819	33	18.594	22.168	57977	20	18.815	5.520	58049	12	22.536	10.462	
57748	37	15.118	16.514	57820	12	22.860	22.791	57978	28	19.014	5.058	58050	20	24.484	10.789	
57749	10	15.466	16.850	57821	31	24.981	22.012	57979	14	19.160	5.378	58051	34	25.011	10.994	
57750	19	16.402	16.484	57822	10	25.374	22.336	57980	22	20.096	5.626	58052	18	0.573	11.736	
57751	14	17.205	16.011	57823	11	1.573	23.499	57981	16	0.410	6.094	58053	25	1.140	11.492	
57752	14	17.890	16.190	57824	10	2.070	23.859	57982	20	2.084	6.574	58054	16	4.018	11.774	
57753	34	20.854	16.430	57825	34	14.044	23.977	57983	15	2.116	6.654	58055	21	4.894	11.418	
57754	30	21.140	16.096	57826	37	14.679	23.472	57984	17	2.644	6.243	58056	12	6.124	11.586	
57755	11	21.314	16.958	57827	25	15.975	23.068	57985	22	3.755	6.199	58057	24	6.216	11.772	
57756	23	23.934	16.778	57828*	36	16.284	23.740	57986	12	4.455	6.335	58058	19	7.114	11.492	
57757*	60	24.620	16.868	57829	11	16.354	23.930	57987	19	5.216	6.452	58059	12	7.622	11.838	
57758	21	0.602	17.941	57830	30	19.308	23.510	57988	32	7.933	6.208	58060	15	10.660	11.300	
57759*	40	0.878	17.432	57831*	45	20.036	23.067	57989	19	8.048	6.834	58061	14	14.692	11.148	
57760	35	2.586	17.745	57832	38	20.465	23.530	57990	13	8.448	6.718	58062	14	18.092	11.780	
57761	31	3.734	17.778	57833	29	21.800	23.260	57991	15	10.825	6.946	58063	18	18.220	11.478	
57762	32	4.275	17.965	57834	11	22.164	23.323	57992	25	11.422	6.678	58064	22	20.254	11.926	
57763	13	8.256	17.769	57835	18	24.084	23.826	57993	15	12.420	6.395	58065	16	20.787	11.536	
57764	24	8.781	17.798	57836	24	0.046	24.416	57994	18	13.550	6.702	58066	27	23.309	11.530	
57765	30	10.378	17.038	57837	37	3.786	24.608	57995	22	13.800	6.565	58067	22	0.854	12.116	
57766	14	11.589	17.808	57838	21	4.644	24.134	57996	17	15.344	6.598	58068	14	1.136	12.536	
57767	26	12.625	17.112	57839	31	6.047	24.950	57997	22	15.564	6.846	58069	16	2.660	12.412	
57768	11	12.970	17.404	57840	30	10.496	24.328	57998	16	16.404	6.564	58070	17	3.412	12.834	
57769	10	16.504	17.762	57841	21	14.556	24.002	57999	23	17.132	6.096	58071	17	4.340	12.777	
57770*	44	19.234	17.730	57842*	39	14.604	24.905	58000	16	25.609	6.484	58072	14	4.842	12.332	
57771	10	20.866	17.505	57843	30	18.381	24.372	58001	21	3.556	7.376	58073	14	5.244	12.111	
57772	18	0.944	18.600	57844	31	19.382	24.754	58002*	38	4.602	7.157	58074*	56	7.573	12.216	
57773	30	1.134	18.080	57845*	65	19.500	24.400	58003	14	5.330	7.158	58075	18	8.322	12.199	
57774*	44	1.641	18.796	57846	34	23.162	24.320	58004	24	6.744	7.230	58076	22	9.982	12.477	
57775*	43	2.534	18.412	57847	18	0.102	25.464	58005	18	9.258	7.681	58077	17	9.818	12.386	
57776	14	5.270	18.162	57848	21	4.864	25.235	58006	21	10.566	7.741	58078	14	10.090	12.410	
57777	17	6.101	18.266	57849	17	7.462	25.768	58007	21	11.280	7.271	58079	16	10.314	12.446	
57778	10	7.441	18.598	57850	19	12.834	25.025	58008	21	13.136	7.694	58080	17	16.434	12.168	
57779	20	11.766	18.437	57851	40	13.272	25.286	58009	18	15.266	7.852	58081	22	18.896	12.167	
57780	24	17.060	18.533	57852	12	14.076	25.346	58010	15	15.676	7.240	58082	23	21.482	12.924	
57781	21	19.939	18.954	57853	13	17.523	25.756	58011	13	18.760	7.754	58083	23	23.602	12.605	
57782	10	22.924	18.907	57854	12	18.665	25.780	58012	12	19.919	7.766	58084	14	25.546	12.233	
57783*	62	23.055	18.230	57855	27	19.727	25.864	58013	23	22.116	7.375	58085	14	0.854	13.092	
57784	10	23.600	18.488	57856	36	20.529	25.361	58014*	36	24.761	7.164	58086	18	2.343	13.355	
57785	33	25.702	18.672	57857	40	23.167	25.870	58015								



58100	24	1.576	14.614	58172	12	21.595	18.954	58244	19	2.639	24.172	58327	30	4.469	5.600	58399	20	6.791	14.357
58101	31	2.226	14.696	58173	22	0.085	19.985	58245	13	5.034	24.457	58328	14	10.412	5.178	58400	14	7.226	14.597
58102	18	3.474	14.278	58174	15	1.369	19.240	58246	20	5.762	24.633	58329	11	12.013	5.285	58401	20	7.649	14.184
58103*	82	4.903	14.742	58175	16	4.407	19.101	58247	21	9.697	24.030	58330*	40	18.220	5.178	58402	22	7.919	14.697
58104	14	5.564	14.820	58176	16	6.516	19.746	58248	24	11.274	24.838	58331	22	21.602	5.842	58403	30	11.977	14.494
58105	18	5.832	14.790	58177	19	8.064	19.417	58249	16	11.537	24.074	58332	27	25.899	5.424	58404	17	16.472	14.283
58106	16	7.606	14.556	58178	15	9.661	19.969	58250	18	11.766	24.590	58333	16	25.998	5.746	58405*	39	21.643	14.042
58107*	52	11.714	14.592	58179	13	10.894	19.684	58251	15	12.310	24.514	58334	30	7.682	7.710	58406	17	22.442	14.244
58108	13	12.074	14.316	58180	14	10.939	19.656	58252	21	12.838	24.566	58335*	58	8.235	6.718	58407	20	2.062	15.186
58109	18	12.793	14.556	58181	21	14.345	19.604	58253	14	12.937	24.653	58336	12	10.866	6.040	58408	14	12.426	15.821
58110	17	13.470	14.843	58182	23	14.586	19.432	58254	16	13.007	24.636	58337	12	13.313	6.058	58409	14	16.757	15.914
58111	21	15.134	14.361	58183	16	15.275	19.281	58255	24	14.334	24.954	58338	13	13.330	6.184	58410	10	18.756	15.721
58112	13	17.864	14.457	58184*	36	17.346	19.088	58256	31	16.346	24.736	58339	9	15.134	6.682	58411	8	22.696	15.203
58113	12	18.070	14.666	58185	12	17.384	19.497	58257	28	17.600	24.016	58340	20	18.408	6.500	58412	25	24.666	15.604
58114	21	20.632	14.942	58186*	34	17.586	19.193	58258	27	18.526	24.537	58341	13	18.422	6.166	58413*	39	1.006	16.223
58115	24	21.363	14.694	58187	26	20.523	19.896	58259*	48	19.364	24.286	58342	8	21.803	6.753	58414	12	6.971	16.352
58116	15	22.079	14.294	58188	19	21.143	19.274	58260	15	4.602	25.451	58343*	31	2.242	7.242	58415	9	12.607	16.244
58117	18	23.626	14.423	58189	31	23.756	19.593	58261	16	8.810	25.934	58344	11	2.377	7.242	58416	15	16.586	16.664
58118	16	24.353	14.204	58190	21	3.510	20.851	58262	12	13.682	25.389	58345	10	3.437	7.382	58417*	39	19.374	16.360
58119	16	24.722	14.318	58191	17	15.426	20.104	58263	28	19.243	25.954	58346*	33	8.016	7.033	58418	9	23.523	16.424
58120	18	0.659	15.031	58192	23	15.518	20.659	58264	16	22.184	25.604	58347	12	13.740	7.958	58419*	36	19.355	17.062
58121*	50	4.254	15.412	58193	14	17.504	20.142	58265	28	22.873	25.374	58348	14	14.361	7.610	58420	12	25.336	17.158
58122	15	7.111	15.947	58194	25	18.376	20.423					58349	28	20.533	7.787	58421	17	4.838	18.938
58123	14	8.776	15.485	58195	12	20.206	20.387					58350*	39	5.551	9.002	58422	9	7.754	18.749
58124	19	9.674	15.030	58196	19	22.618	20.064					58351*	38	8.528	8.276	58423	10	8.566	18.078
58125	14	11.477	15.653	58197	16	22.854	20.966					58352	19	9.066	8.338	58424	27	12.393	18.167
58126	17	14.166	15.301	58198	12	23.366	20.203					58353	11	15.856	8.190	58425*	57	17.882	18.259
58127	17	15.038	15.216	58199*	35	24.966	20.010					58354	8	16.768	8.184	58426	32	19.796	18.791
58128	12	15.715	15.948	58200	17	25.006	20.087					58355*	26	18.464	8.021	58427	8	20.142	18.784
58129	16	16.295	15.248	58201	16	0.644	21.522					58356	10	21.334	8.660	58428	11	24.462	18.678
58130	15	18.656	15.160	58202	16	3.446	21.545					58357	14	14.055	9.176	58429	27	1.273	19.670
58131	16	21.978	15.675	58203	31	4.740	21.352					58358	11	14.844	9.784	58430	24	15.427	19.183
58132	30	24.560	15.108	58204	15	5.045	21.958					58359	20	17.218	9.099	58431	20	16.550	19.372
58133	19	0.803	16.067	58205	14	9.704	21.654					58360	11	17.658	9.124	58432	9	20.704	19.186
58134	12	2.316	16.974	58206	23	11.036	21.202					58361	10	18.318	9.623	58433	20	22.326	19.808
58135	20	2.862	16.255	58207	14	11.515	21.326					58362	29	19.592	9.874	58434	10	24.298	19.148
58136	16	4.324	16.354	58208	14	15.798	21.909					58363	12	1.976	10.867	58435*	36	2.483	20.086
58137	15	4.913	16.842	58209	24	19.248	21.830					58364	8	4.110	10.254	58436	23	2.520	20.163
58138*	38	6.826	16.408	58210	28	22.900	21.578					58365	34	5.308	10.202	58437	8	2.910	20.756
58139*	36	12.464	16.186	58211	30	25.530	21.087					58366	32	7.787	10.961	58438*	54	4.662	20.125
58140	18	14.220	16.277	58212	31	3.506	22.326					58367	31	7.906	10.856	58439*	42	5.656	20.946
58141	13	16.701	16.446	58213	14	3.908	22.646					58368	9	14.106	10.617	58440	26	9.208	20.981
58142*	48	16.825	16.106	58214	23	5.981	22.502					58369	9	17.847	10.044	58441	20	9.240	20.828
58143	15	16.874	16.434	58215	16	13.438	22.682					58370	19	21.200	10.023	58442	20	11.362	20.150
58144	16	18.300	16.603	58216	19	16.565	22.292					58371*	38	23.574	10.437	58443	23	14.196	20.984
58145	13	19.734	16.237	58217	34	18.098	22.204					58372	30	24.114	10.230	58444	8	14.435	20.526
58146	12	23.115	16.226	58218	14	21.635	22.514					58373	40	25.970	10.912	58445	20	0.422	21.658
58147*	38	23.502	16.144	58219	13	23.046	22.094					58374	9	4.369	11.518	58446	30	3.051	21.162
58148	15	23.940	16.438	58220	27	24.171	22.362					58375*	48	8.776	11.577	58447	17	8.154	21.611
58149	22	2.346	17.074	58221	20	0.331	23.648					58376	16	20.740	11.798	58448	20	8.348	21.090
58150*	57	3.033	17.149	58222	18	0.698	23.703					58377	22	23.364	11.340	58449	25	17.657	21.464
58151	16	6.292	17.210	58223	14	1.386	23.156					58378	22	1.098	12.685	58450	13	22.908	21.200
58152*	30	7.553	17.450	58224	12	5.016	23.540					58379	14	4.682	12.764	58451	13	23.254	21.918
58153*	34	8.578	17.546	58225	16	7.106	23.262					58380	11	6.048	12.747	58452	18	1.695	22.441
58154	18	11.414	17.063	58226	14	8.140	23.628					58381	16	9.050	12.300	58453	9	9.808	22.072
58155	16	12.066	17.895	58227	36	9.216	23.970					58382*	35	21.954	12.823	58454	31	13.134	22.874
58156*	96	18.380	17.528	58228	16	10.865	23.284					58383	22	24.442	12.043	58455*	35	17.156	22.930
58157	17	18.606	17.180	58229	30	11.597	23.756					58384	36	24.525	12.094	58456	32	19.626	22.258
58158*	36	19.824	17.422	58230	12	12.462	23.223					58385	18	8.605	12.172	58457	26	23.172	22.693
58159	34	20.254	17.554	58231	20	12.724	23.616					58386	12	8.654	13.408	58458	10	23.902	22.998
58160	16	22.168	17.814	58232	34	14.331	23.062					58387	35	9.504	13.768	58459	32	2.331	23.344
58161*	59	1.484	18.555	58233	14	15.056	23.306					58388	32	11.306	13.840	58460	28	3.216	23.998
58162	18	2.044	18.800	58234	18	17.344	23.318					58389	10	12.553	13.818	58461	24	9.226	23.424
58163	23	4.165	18.946	58235	37	18.126	23.393					58390	22	13.776	13.505	58462	10	12.690	23.907
58164	14	6.094	18.593	58236	16	18.599	23.753					58391	17	15.588	13.302	58463	8	24.859	23.021
58165	25	7.313	18.848	58237	16	18.808	23.103					58392	15	16.811	13.428	58464*	33	5.248	24.772
58166	15	12.516	18.790	58238	16	19.106	23.293					58393*	43	16.834	13.707	58465	11	6.648	24.408
58167	12	14.635																	



58471	10	2.008	25.072	58542*	37	7.000	5.895	58614	10	19.166	11.322	58686	28	2.516	18.670	58758	32	11.197	25.770
58472	43	6.287	25.720	58543	12	8.676	5.108	58615	26	20.903	11.538	58687	21	5.514	18.980	58759	13	13.541	25.841
58473	20	7.344	25.766	58544	32	13.826	5.618	58616	15	24.530	11.616	58688	11	10.441	18.566	58760	13	19.210	25.373
58474	34	8.269	25.044	58545	34	14.670	5.162	58617	26	24.946	11.718	58689	16	12.864	18.150	58761	12	21.943	25.484
58475	21	12.664	25.372	58546	17	19.742	5.487	58618	31	2.388	12.035	58690	29	13.864	18.629				
58476	34	15.996	25.542	58547	32	20.170	5.596	58619	37	2.471	12.084	58691	26	21.960	18.024				
58477	26	19.584	25.856	58548*	98	25.124	5.290	58620	12	16.489	12.086	58692	32	0.400	19.834				
				58549	31	5.369	6.090	58621	12	22.028	12.984	58693	25	2.358	19.142				
				58550	29	12.849	6.534	58622	14	22.806	12.182	58694	16	4.112	19.584				
				58551	12	14.420	6.231	58623	27	2.460	13.648	58695	14	6.903	19.552				
				58552	17	15.073	6.821	58624	25	5.400	13.182	58696	30	8.758	19.301				
				58553	12	16.593	6.825	58625	19	5.452	13.509	58697	34	10.511	19.480				
				58554*	36	17.248	6.668	58626	17	6.610	13.750	58698	32	11.154	19.566				
				58555	14	17.579	6.923	58627	30	7.399	13.862	58699	33	11.930	19.092				
				58556	31	17.646	6.100	58628	25	11.348	13.272	58700	14	12.730	19.762				
				58557	20	21.245	6.958	58629	31	14.776	13.100	58701	18	13.555	19.785				
				58558*	34	23.850	6.386	58630	28	16.958	13.845	58702	36	4.698	20.290				
				58559	33	24.007	6.591	58631	15	17.136	13.506	58703	16	5.431	20.207				
				58560	12	25.100	6.507	58632	17	20.855	13.254	58704	26	8.240	20.380				
				58561	12	25.442	6.889	58633	17	25.166	13.797	58705	13	10.765	20.560				
				58562	13	3.109	7.492	58634	40	25.752	13.574	58706	11	10.784	20.600				
				58563	10	4.520	7.126	58635	30	0.424	14.266	58707	31	12.032	20.289				
				58564	26	7.917	7.912	58636	22	8.376	14.458	58708	16	12.916	20.834				
				58565*	36	8.604	7.868	58637	18	8.918	14.204	58709	21	16.400	20.662				
				58566	18	11.416	7.779	58638	30	8.999	14.542	58710	32	19.408	20.243				
				58567	35	15.050	7.029	58639	10	11.848	14.076	58711	17	19.840	20.350				
				58568	28	18.249	7.456	58640	13	12.976	14.260	58712	12	20.308	20.588				
				58569*	37	24.505	7.501	58641	34	13.568	14.524	58713	34	20.336	20.022				
				58570	21	25.126	7.685	58642	14	14.660	14.513	58714	16	25.418	20.996				
				58571	37	4.833	8.602	58643	24	21.825	14.935	58715	16	0.680	21.444				
				58572	39	5.006	8.257	58644	33	21.856	14.615	58716	26	1.004	21.214				
				58573	17	14.165	8.627	58645	17	0.690	15.221	58717	28	1.360	21.928				
				58574	12	14.901	8.442	58646	33	2.668	15.592	58718	13	2.636	21.272				
				58575	18	16.470	8.946	58647	13	4.415	15.362	58719	24	5.607	21.296				
				58576	35	17.327	8.105	58648	32	4.814	15.458	58720	22	5.956	21.700				
				58577	24	17.551	8.604	58649	22	6.746	15.978	58721	21	8.860	21.121				
				58578	12	20.176	8.706	58650	28	7.636	15.938	58722	30	9.173	21.586				
				58579	13	22.474	8.483	58651	18	9.318	15.791	58723	28	12.594	21.130				
				58580	15	22.936	8.238	58652	14	12.662	15.024	58724	16	17.544	21.234				
				58581	16	3.552	9.251	58653*	37	14.332	15.526	58725	24	18.708	21.654				
				58582*	45	4.361	9.372	58654	18	14.446	15.175	58726*	35	20.520	21.260				
				58583	18	4.805	9.110	58655	33	18.972	15.126	58727	12	25.416	21.986				
				58584	34	8.025	9.744	58656	32	20.800	15.582	58728	31	1.292	22.704				
				58585	20	11.367	9.387	58657	30	25.851	15.706	58729	25	3.950	22.081				
				58586	22	12.537	9.900	58658	14	1.538	16.428	58730	19	5.764	22.281				
				58587	15	14.656	9.241	58659	19	3.666	16.572	58731	17	5.912	22.924				
				58588	17	14.802	9.672	58660	19	8.645	16.815	58732	33	11.718	22.538				
				58589	31	22.838	9.514	58661	17	9.416	16.876	58733	14	19.788	22.923				
				58590	14	22.990	9.732	58662	30	11.570	16.532	58734*	36	22.380	22.728				
				58591	13	24.448	9.996	58663	30	12.405	16.934	58735	12	23.924	22.397				
				58592	23	25.416	9.806	58664	14	12.532	16.145	58736	10	24.210	22.335				
				58593*	37	1.494	10.444	58665	13	12.609	16.174	58737	16	25.712	22.318				
				58594	34	2.030	10.228	58666	34	16.200	16.814	58738	21	1.934	23.521				
				58595*	41	3.895	10.880	58667*	34	23.060	16.042	58739	15	2.984	23.006				
				58596	30	6.005	10.114	58668	34	24.382	16.214	58740	31	7.845	23.488				
				58597	10	6.495	10.777	58669	14	0.476	17.687	58741	33	11.115	23.933				
				58598	27	9.770	10.223	58670	10	1.654	17.710	58742	35	14.959	23.860				
				58599	36	10.186	10.109	58671	29	3.365	17.134	58743	15	15.544	23.374				
				58600*	34	10.465	10.291	58672	23	4.654	17.006	58744	12	18.056	23.418				
				58601	16	11.059	10.080	58673	15	5.158	17.855	58745*	49	22.962	23.214				
				58602	24	13.764	10.651	58674*	37	5.710	17.280	58746	29	8.877	24.710				
				58603	13	13.781	10.004	58675	25	8.034	17.736	58747	24	14.637	24.184				
				58604	21	14.662	10.100	58676	12	8.562	17.564	58748	24	15.474	24.760				
				58605	31	19.142	10.706	58677*	37	13.376	17.081	58749	19	16.324	24.577				
				58606	21	22.318	10.907	58678	17	15.716	17.816	58750	30	18.410	24.270				
				58607	31	1.299	11.348	58679	20	16.564	17.740	58751	16	19.556	24.968				
				58608	33	7.803	11.508	58680	18	16.716	17.995	58752	23	20.431	24.892				
				58609	33	7.886	11.166	58681	31	18.210	17.861	58753	38	20.924	24.163				
				58610	30	9.132	11.738	58682	16	18.780	17.540	58754	17	2.976	25.040				
				58611	30	10.891	11.879	58683	26	18.870	17.350	58755	17	8.352	25.887				
				58612	25	14.224	11.254	58684	17	23.594	17.012	58756	27	10.213	25.009				
				58613	12	14.250	11.734	58685	28	25.634	17.420	58757	30	10.783	25.529				

R.A. 21<sup>h</sup> 16<sup>m</sup>

Plate 1277; 1918 Oct. 28.

Provisional Constants.

A	B	C
-01784	+00851	+1478

D	E	F
-00814	-01767	-2947

Mag. = 17.6 - 1.09√d

No.	d	x	y
58801*	51	4.054	0.366
58802	24	7.328	0.339
58803	18	8.362	0.634
58804	22	9.150	0.556
58805	16	12.253	0.504
58806	50	15.374	0.862
58807	50	15.364	0.056
58808	13	15.896	0.756
58809	16	18.802	0.849
58810	46	19.205	0.214
58811	16	0.944	1.406
58812	43	7.436	1.555
58813	22	13.550	1.157
58814	14	14.580	1.704
58815	10	14.900	1.170
58816	32	18.272	1.696
58817	13	24.152	1.182
58818	14	4.787	2.558
58819	12	4.880	2.790
58820	35	6.538	2.850
58821	25	8.418	2.706
58822	28	9.070	2.613
58823	16	12.276	2.614
58824	21	19.720	2.854
58825	19	0.614	3.620
58826	25	4.800	3.784
58827	16	5.864	3.259
48828*	41	8.805	3.387
58829	12	11.636	3.538
58830	13	13.581	3.544
58831	35	13.895	3.103
58832	12	14.646	3.821
58833	12	15.222	3.934
58834	38	15.895	3.386
58835	13	20.470	3.426
58836	12	23.933	3.988
58837	29	25.058	3.544
58838	22	4.654	4.484
58839	36	5.940	4.815
58840*	46	12.613	4.760
58841	12	16.518	4.470
58842	42	17.313	4.272
58843	13	24.582	4.631
58844	40	25.500	4.855



58845	15	1.922	5.026	58917	47	13.394	10.451	58989	11	5.284	17.946	59061	40	10.593	24.243	59134	14	9.473	3.046
58846*	129	2.398	5.711	58918	25	16.174	10.781	58990	40	9.920	17.600	59062	20	10.614	24.397	59135	28	10.060	3.506
58847	18	3.936	5.092	58919	12	18.904	10.365	58991	26	12.862	17.474	59063	27	11.590	24.450	59136	19	11.145	3.170
58848	22	4.786	5.798	58920	12	19.148	10.953	58992	26	13.276	17.136	59064	30	18.170	24.024	59137	29	15.462	3.664
58849	28	7.345	5.846	58921	27	24.966	10.212	58993	13	15.051	17.982	59065*	62	19.755	24.923	59138	17	15.514	3.405
58850	22	10.366	5.776	58922	40	4.604	11.516	58994	12	15.943	17.578	59066*	56	21.225	24.656	59139	27	19.139	3.302
58851	45	14.522	5.319	58923	22	8.561	11.806	58995	18	17.914	17.406	59067	13	25.774	24.522	59140	27	24.804	3.941
58852	28	19.672	5.266	58924	13	21.344	11.970	58996	15	19.190	17.204	59068	43	3.666	25.438	59141	22	1.661	4.130
58853	37	20.810	5.060	58925	13	21.391	11.526	58997	10	20.394	17.960	59069	20	3.672	25.234	59142	15	2.316	4.755
58854	34	22.259	5.394	58926	16	22.555	11.705	58998	33	21.964	17.666	59070	22	10.234	25.276	59143*	37	3.240	4.974
58855*	48	1.146	6.824	58927	12	0.178	12.635	58999*	60	22.013	17.048	59071	37	10.678	25.404	59144*	51	4.232	4.501
58856	12	2.398	6.927	58928	14	0.366	12.484	59000	32	23.912	17.936	59072	40	16.742	25.338	59145	17	7.476	4.953
58857	36	5.440	6.215	58929	17	1.894	12.046	59001	20	25.602	17.106	59073	66	17.576	25.636	59146	22	8.750	4.800
58858	17	8.821	6.354	58930	29	2.309	12.144	59002	15	3.806	18.535	59074	12	21.483	25.412	59147	20	10.334	4.150
58859	12	14.041	6.098	58931	10	7.584	12.600	59003	12	7.355	18.278	59075	22	21.584	25.864	59148	12	14.764	4.786
58860	32	15.268	6.174	58932	30	9.570	12.850	59004	18	12.734	18.474					59149	21	15.834	4.014
58861	14	18.392	6.126	58933	36	20.509	12.296	59005	27	13.974	18.964					59150	38	22.466	4.926
58862	12	18.800	6.189	58934	31	21.316	12.826	59006	36	17.100	18.744					59151	32	22.878	4.376
58863	20	19.242	6.417	58935	16	21.359	12.815	59007	12	18.076	18.406					59152*	43	24.813	4.290
58864	33	21.140	6.016	58936	13	22.183	12.164	59008	29	22.000	18.290					59153	26	0.004	5.551
58865	10	22.301	6.711	58937	14	22.308	12.874	59009	11	22.048	18.686					59154	18	3.736	5.671
58866	11	22.616	6.876	58938*	60	24.156	12.743	59010	29	4.784	19.856					59155	19	3.740	5.271
58867	42	1.304	7.025	58939	31	25.215	12.256	59011	24	6.966	19.054					59156	17	8.638	5.806
58868*	51	1.814	7.932	58940	12	0.254	13.860	59012	12	8.084	19.356					59157	15	8.720	5.236
58869	17	2.742	7.305	58941*	53	3.143	13.985	59013	15	10.106	19.054					59158	24	10.077	5.856
58870	24	3.834	7.406	58942	19	3.718	13.535	59014	12	10.200	19.474					59159	31	12.248	5.602
58871	22	4.446	7.958	58943	12	5.672	13.806	59015	25	10.366	19.945					59160	31	18.130	5.010
58872	11	4.986	7.748	58944	27	6.332	13.106	59016	37	11.692	19.834					59161	34	19.386	5.002
58873	20	7.810	7.026	58945	10	6.842	13.608	59017*	53	11.796	19.576					59162	22	24.166	5.104
58874	22	8.540	7.746	58946	12	7.712	13.936	59018	20	12.044	19.515					59163	43	24.632	5.421
58875	14	9.985	7.672	58947	10	8.821	13.867	59019*	62	12.457	19.794					59164	27	25.784	5.181
58876	40	11.927	7.265	58948	10	10.202	13.444	59020	14	14.408	19.356					59165	10	0.061	6.871
58877	20	12.168	7.965	58949	13	16.082	13.754	59021	29	15.375	19.568					59166	14	1.790	6.808
58878	24	15.343	7.725	58950	25	17.264	13.704	59022	14	17.372	19.094					59167	12	2.380	6.386
58879	12	16.812	7.474	58951	40	19.867	13.356	59023	28	21.406	19.677					59168	13	4.625	6.774
58880	20	18.486	7.714	58952	31	21.515	13.246	59024	28	21.751	19.546					59169*	39	5.420	6.534
58881	25	20.294	7.874	58953	38	24.908	13.514	59025	27	22.683	19.476					59170	30	10.250	6.643
58882	17	21.571	7.347	58954	18	2.557	14.218	59026	27	25.654	19.696					59171	21	12.526	6.659
58883	10	22.592	7.638	58955	12	3.639	14.326	59027	10	0.474	20.938					59172	38	15.102	6.730
58884	58	25.742	7.584	58956*	68	13.046	14.494	59028	20	1.580	20.850					59173	19	18.154	6.160
58885	12	0.256	8.694	58957	25	14.536	14.603	59029	10	3.966	20.662					59174	21	18.476	6.014
58886	22	2.439	8.106	58958	24	21.972	14.615	59030	47	4.288	20.432					59175	26	21.880	6.274
58887	12	3.878	8.479	58959	10	25.237	14.244	59031	37	5.266	20.068					59176	30	24.470	6.379
58888	40	4.822	8.563	58960	40	4.780	15.284	59032	16	5.488	20.968					59177*	44	3.513	7.699
58889	18	5.799	8.982	58961	25	8.145	15.315	59033	14	6.090	20.974					59178	17	6.328	7.592
58890	22	7.952	8.566	58962	18	11.409	15.136	59034	32	10.186	20.967					59179	31	12.586	7.206
58891	13	11.334	8.082	58963*	60	11.817	15.568	59035*	50	13.974	20.260					59180	32	15.882	7.378
58892	15	14.471	8.914	58964	20	11.948	15.664	59036	31	14.926	20.814					59181	36	17.128	7.130
58893	30	19.914	8.326	58965	17	15.240	15.296	59037	18	15.164	20.525					59182*	39	17.338	7.388
58894	40	23.566	8.078	58966	12	16.352	15.524	59038	24	24.943	20.074					59183	10	24.582	7.312
58895	12	23.886	8.125	58967	10	19.848	15.757	59039	32	2.914	21.415					59184	36	1.347	8.223
58896	47	23.925	8.736	58968	11	23.085	15.206	59040	30	8.942	21.730					59185	17	1.666	8.268
58897	17	24.234	8.016	58969	12	24.838	15.914	59041	13	9.275	21.252					59186	38	1.714	8.876
58898	34	0.174	9.965	58970	14	25.130	15.628	59042	32	14.648	21.974					59187	21	2.012	8.154
58899	12	3.638	9.570	58971*	40	0.484	16.495	59043*	48	14.752	21.368					59188	33	12.447	8.234
58900	22	5.932	9.122	58972	40	1.806	16.645	59044	27	20.611	21.724					59189	29	12.726	8.085
58901	16	6.617	9.965	58973	33	3.272	16.116	59045	18	1.436	22.836					59190	10	13.179	8.063
58902	12	17.227	9.132	58974	27	5.078	16.400	59046	19	1.719	22.765					59191	34	15.864	8.210
58903*	60	17.750	9.198	58975*	50	9.056	16.861	59047	20	2.925	22.404					59192	21	18.573	8.693
58904	38	20.296	9.196	58976	43	9.556	16.842	59048	30	3.224	22.735					59193*	40	19.886	8.684
58905	11	21.617	9.697	58977	10	9.726	16.337	59049	10	3.522	22.638					59194	31	20.535	8.584
58906	22	23.240	9.572	58978	44	10.341	16.864	59050	12	12.526	22.464					59195	10	21.725	8.116
58907	10	25.144	9.307	58979	16	10.518	16.976	59051	12	16.184	22.846					59196	12	22.715	8.955
58908	11	25.255	9.371	58980	31	10.665	16.474	59052	28	18.569	22.774					59197	11	22.788	8.394
58909	18	0.328	10.185	58981	33	16.210	16.068	59053	34	18.806	22.498					59198	28	25.544	8.210
58910	24	1.792	10.426	58982	37	25.038	16.380	59054	15	20.564	22.422					59199	30	1.037	9.718
58911	28	2.755	10.225	58983	38	25.666	16.636	59055*	73	0.478	23.666					59200*	43	13.492	9.994
58912	25	3.404	10.412	58984	16	1.026	17.452	59056	14	2.473	23.787					59201	12	24.927	9.174
58913	12	10.342	10.108	58985	13	1.248	17.262	59057	10										



59206	12	5.738	10.496	59278	36	24.600	16.252	59350	15	23.940	21.990	59417	22	18.750	1.734	59489	13	7.127	8.262
59207	40	6.876	10.250	59279	11	2.756	17.426	59351	15	4.042	22.150	59418	11	20.434	1.070	59490	20	8.670	8.639
59208	36	7.794	10.222	59280	13	2.765	17.288	59352	15	5.002	22.564	59419*	46	21.270	1.286	59491	18	14.762	8.804
59209	26	13.212	10.825	59281	26	3.494	17.224	59353	11	9.460	22.384	59420	18	25.726	1.306	59492	10	17.364	8.472
59210	36	16.148	10.140	59282	26	6.832	17.577	59354	18	10.760	22.791	59421	21	2.434	2.880	59493	16	22.316	8.851
59211	11	16.314	10.190	59283	28	8.026	17.609	59355	38	11.696	22.526	59422	11	5.408	2.150	59494	11	0.478	9.218
59212	11	20.084	10.058	59284	15	11.018	17.572	59356	29	15.126	22.905	59423	12	6.312	2.665	59495	12	2.689	9.411
59213	14	20.115	10.981	59285	33	14.375	17.902	59357	15	15.177	22.085	59424	10	7.791	2.661	59496	14	2.890	9.354
59214	13	20.794	10.308	59286	17	18.934	17.398	59358	18	19.776	22.182	59425	25	9.374	2.892	59497	11	6.933	9.688
59215	31	23.304	10.771	59287	24	19.034	17.054	59359	13	21.540	22.470	59426	20	10.224	2.569	59498	20	11.343	9.759
59216	39	25.915	10.962	59288	29	19.914	17.342	59360	33	21.865	22.852	59427	24	18.166	2.680	59499	10	12.638	9.860
59217	20	0.376	11.865	59289*	42	20.525	17.961	59361	14	23.178	22.970	59428	10	20.356	2.717	59500*	30	14.126	9.980
59218	11	10.145	11.334	59290	22	20.827	17.312	59362	18	23.374	22.730	59429	10	2.550	3.506	59501	12	17.880	9.185
59219	11	18.923	11.548	59291	32	1.816	18.076	59363	25	6.012	23.431	59430*	36	4.384	3.867	59502	11	18.424	9.080
59220	24	20.685	11.276	59292	11	4.722	18.664	59364	34	7.556	23.701	59431	10	6.330	3.204	59503	20	19.880	9.810
59221	10	21.670	11.622	59293*	49	5.773	18.390	59365	18	12.418	23.020	59432	15	8.399	3.045	59504	22	20.620	9.043
59222	30	23.509	11.388	59294	17	7.308	18.942	59366	16	14.284	23.246	59433	17	17.314	3.034	59505	10	21.314	9.574
59223	11	24.499	11.110	59295	26	8.955	18.812	59367	37	15.706	23.899	59434	17	20.898	3.993	59506	20	24.004	9.460
59224	12	25.718	11.998	59296	35	8.964	18.872	59368	37	17.018	23.756	59435	23	23.424	3.130	59507	27	3.960	10.738
59225	11	1.452	12.941	59297	14	9.976	18.053	59369	30	21.086	23.400	59436	12	25.903	3.843	59508	11	4.586	10.365
59226*	46	1.991	12.878	59298	30	13.811	18.654	59370	28	21.937	23.670	59437	20	0.597	4.634	59509	12	6.766	10.690
59227	32	3.046	12.380	59299	10	16.511	18.010	59371	22	23.362	23.820	59438	17	2.520	4.180	59510*	58	9.562	10.656
59228	21	5.978	12.474	59300	15	20.949	18.328	59372	30	24.445	23.154	59439*	37	2.528	4.528	59511	14	13.326	10.266
59229	20	9.735	12.210	59301	18	22.687	18.056	59373	18	3.764	24.636	59440	24	3.816	4.258	59512*	35	18.274	10.928
59230	21	11.036	12.752	59302	18	23.441	18.852	59374	13	9.064	24.159	59441	10	4.692	4.374	59513	10	18.640	10.623
59231	26	15.758	12.539	59303*	41	23.480	18.129	59375	17	10.404	24.514	59442	20	6.389	4.835	59514	13	19.532	10.985
59232	17	19.594	12.384	59304	35	25.336	18.508	59376*	55	11.483	24.054	59443	10	6.536	4.630	59515	12	19.815	10.852
59233*	46	21.835	12.673	59305	24	25.555	18.580	59377	31	12.055	24.509	59444	17	7.060	4.060	59516	17	20.450	10.296
59234*	41	22.956	12.540	59306	29	0.605	19.630	59378	13	18.388	24.938	59445	18	9.936	4.528	59517	10	22.650	10.109
59235	31	24.659	12.504	59307	18	2.932	19.883	59379	28	18.992	24.103	59446	14	18.680	4.424	59518	16	23.547	10.742
59236	14	0.148	13.028	59308	30	3.578	19.812	59380	32	22.916	24.196	59447	13	19.580	4.133	59519	17	1.080	11.024
59237	33	2.752	13.638	59309	32	5.466	19.122	59381	14	9.089	25.422	59448	34	21.249	4.656	59520	16	1.294	11.640
59238	12	4.839	13.574	59310*	44	7.785	19.834	59382	14	16.142	25.488	59449	11	23.578	4.396	59521	12	2.282	11.355
59239	13	5.174	13.732	59311	13	9.464	19.856	59383	34	20.265	25.542	59450	13	24.585	4.813	59522	28	3.694	11.190
59240	11	9.764	13.043	59312	29	9.985	19.906	59384	40	23.813	25.472	59451	13	24.874	4.266	59523	19	7.256	11.386
59241*	39	9.832	13.752	59313	28	13.766	19.356	59385	18	25.163	25.233	59452	28	0.190	5.184	59524*	65	12.290	11.194
59242	30	10.138	13.048	59314*	90	13.972	19.394					59453	12	1.890	5.348	59525	13	13.866	11.295
59243	18	12.073	13.910	59315	27	17.254	19.610					59454	40	2.358	5.662	59526	13	16.490	11.014
59244	34	14.609	13.093	59316	13	18.853	19.104					59455	16	3.509	5.410	59527	12	18.084	11.343
59245	34	16.471	13.058	59317	32	19.962	19.890					59456	28	10.040	5.568	59528*	40	18.114	11.094
59246	29	21.000	13.440	59318	22	20.239	19.660					59457	13	10.084	5.710	59529*	38	20.224	11.094
59247	32	22.038	13.346	59319	25	20.480	19.334					59458	19	15.508	5.784	59530	28	20.238	11.088
59248	42	23.935	13.752	59320	38	21.844	19.846					59459	13	16.436	5.327	59531	13	21.746	11.122
59249	13	3.086	14.370	59321	30	24.822	19.524					59460	34	20.153	5.271	59532	14	23.410	11.850
59250	20	7.385	14.950	59322	12	25.150	19.788					59461	16	23.436	5.527	59533*	36	0.749	12.794
59251	15	10.752	14.282	59323	13	1.261	20.201					59462	12	24.111	5.736	59534	19	2.454	12.743
59252	27	13.618	14.482	59324	32	2.873	20.198					59463	15	2.208	6.620	59535	12	3.509	12.226
59253	13	15.496	14.479	59325	25	4.130	20.673					59464	10	3.763	6.402	59536	12	5.188	12.552
59254	29	15.844	14.097	59326	28	6.537	20.874					59465	24	4.756	6.304	59537	14	6.580	12.690
59255	17	16.860	14.505	59327	30	9.726	20.525					59466	10	6.804	6.649	59538	13	9.149	12.606
59256	11	17.514	14.500	59328	28	11.576	20.058					59467	21	8.657	6.178	59539	27	13.804	12.750
59257	10	3.003	15.753	59329	27	16.954	20.439					59468	18	15.532	6.820	59540	11	14.640	12.966
59258	38	4.434	15.511	59330*	76	17.958	20.445					59469	13	15.640	6.828	59541	10	15.597	12.830
59259	23	9.756	15.281	59331	12	21.074	20.562					59470	10	15.840	6.618	59542	13	16.998	12.169
59260	15	9.998	15.673	59332	18	22.250	20.422					59471	9	16.838	6.548	59543	16	19.210	12.000
59261	30	12.736	15.616	59333	20	22.574	20.733					59472	22	19.426	6.301	59544	13	22.422	12.992
59262	12	16.187	15.887	59334	14	23.518	20.802					59473	11	21.750	6.448	59545	32	1.740	13.995
59263	18	16.528	15.348	59335	27	4.374	21.486					59474	10	23.362	6.464	59546	12	7.618	13.172
59264	14	20.133	15.840	59336	13	4.904	21.498					59475	11	4.514	7.875	59547*	27	10.497	13.790
59265	30	21.073	15.574	59337	27	5.386	21.676					59476	26	7.506	7.336	59548	10	21.812	13.458
59266	17	21.186	15.063	59338*	50	6.275	21.388					59477*	28	9.860	7.950	59549	11	6.672	14.578
59267	10	2.455	16.030	59339	34	6.746	21.773					59478	21	14.593	7.794	59550	12	8.126	14.670
59268	12	2.716	16.040	59340	18	9.726	21.903					59479	14	15.264	7.606	59551	20	9.216	14.031
59269	34	2.920	16.504	59341	17	13.780	21.608					59480*	37	18.410	7.298	59552	13	10.731	14.231
59270	34	3.553	16.754	59342*	45	17.762	21.464					59481	11	19.946	7.912	59553*	58	11.258	14.784
59271	28	6.771	16.954	59343	23	19.628	21.883					59482</							



59561	21	22.777	14.700	59633	10	13.584	20.732	R.A. 21 <sup>h</sup> 40 <sup>m</sup>				59806	14	25.860	5.720	59878	11	10.614	12.149
59562	16	25.045	14.926	59634	12	14.134	20.299	Plate 1280 ; 1918 Oct. 30.				59807	20	25.890	5.996	59879	11	11.701	12.695
59563	11	2.680	15.862	59635	15	14.144	20.358	Provisional Constants.				59808	15	1.078	6.694	59880*	42	12.474	12.996
59564	11	5.580	15.422	59636	22	17.240	20.728	A B C				59809	22	12.374	6.725	59881	20	21.219	12.398
59565	14	6.965	15.582	59637*	46	18.374	20.345	-0.1767 +.00812 +.1256				59810	12	17.520	6.579	59882	24	21.472	12.822
59566*	60	7.250	15.136	59638	27	18.448	20.433	D E F				59811	24	24.812	6.199	59883	16	22.814	12.058
59567	13	7.728	15.058	59639	10	21.773	20.272	-0.0802 -.01768 -.1275				59812	14	25.550	6.706	59884	11	25.833	12.273
59568	14	8.938	15.934	59640	14	0.074	21.674	Mag.=16.8-1.09√d				59813	12	2.666	7.716	59885	12	0.196	13.231
59569	21	9.673	15.422	59641	13	1.549	21.766					59814	10	2.774	7.278	59886	25	3.867	13.322
59570	18	13.858	15.693	59642	15	7.890	21.749					59815	10	4.992	7.286	59887	20	7.614	13.390
59571	10	16.600	15.268	59643	12	8.626	21.020					59816	12	6.819	7.252	59888*	52	8.320	13.139
59572	12	22.032	15.242	59644	12	10.338	21.543					59817	13	8.146	7.554	59889	35	9.094	13.558
59573	10	25.029	15.770	59645	12	10.704	21.596					59818	28	8.256	7.193	59890	11	15.192	13.970
59574	14	25.036	15.830	59646	20	19.820	21.886					59819	12	13.180	7.398	59891	12	15.710	13.532
59575	24	2.406	16.772	59647	30	22.568	21.136					59820	22	15.036	7.987	59892	14	16.409	13.978
59576	24	2.430	16.491	59648	22	25.336	21.394					59821*	48	16.126	7.994	59893	24	20.494	13.830
59577	14	4.183	16.248	59649	17	0.997	22.006					59822	16	16.728	7.234	59894	40	22.637	13.206
59578	12	5.884	16.894	59650	11	1.270	22.976					59823	14	19.207	7.009	59895	23	23.946	13.908
59579	12	8.460	16.770	59651	12	1.828	22.238					59824	23	22.700	7.046	59896*	44	24.179	13.396
59580	11	10.628	16.408	59652	11	9.177	22.058					59825	20	23.888	7.834	59897*	38	24.200	13.888
59581	22	16.422	16.670	59653	13	9.685	22.258					59826	14	24.348	7.674	59898	20	24.810	13.460
59582	13	16.825	16.612	59654	16	10.849	22.924					59827	10	6.846	8.028	59899	38	0.458	14.389
59583	13	19.318	16.977	59655	10	11.859	22.302					59828*	40	8.659	8.328	59900	25	0.566	14.935
59584	20	19.700	16.860	59656	18	14.498	22.810					59829	12	9.484	8.885	59901	10	3.975	14.645
59585	13	21.174	16.508	59657	20	19.188	22.680					59830	22	10.021	8.296	59902	20	4.290	14.730
59586*	49	21.332	16.566	59658	11	23.548	22.512					59831	13	11.379	8.762	59903	22	10.046	14.668
59587	14	22.120	16.710	59659	16	24.229	22.382					59832	27	14.084	8.256	59904	24	13.452	14.958
59588	11	24.518	16.314	59660	25	24.888	22.071					59833	32	17.294	8.569	59905	30	18.214	14.184
59589	12	5.213	17.020	59661	11	25.544	22.107					59834	22	18.144	8.449	59906	11	18.638	14.690
59590	17	7.372	17.133	59662	10	1.079	23.224					59835*	80	19.135	8.686	59907*	52	25.394	14.439
59591	10	7.609	17.947	59663	17	2.344	23.394					59836	24	21.925	8.891	59908	11	25.414	14.130
59592	29	9.110	17.534	59664	10	3.467	23.750					59837	14	22.833	8.675	59909	21	2.838	15.139
59593	20	9.186	17.846	59665	14	10.322	23.599					59838	12	23.279	8.918	59910	10	7.386	15.479
59594	17	10.623	17.414	59666	20	10.830	23.092					59839	28	0.051	9.090	59911	20	8.650	15.244
59595	14	13.058	17.739	59667*	110	11.597	23.316					59840	23	1.748	9.682	59912	12	8.954	15.728
59596	15	15.348	17.846	59668	27	11.760	23.159					59841	11	2.712	9.733	59913	16	12.116	15.387
59597	11	16.316	17.716	59669	11	12.589	23.700					59842*	40	5.530	9.780	59914	25	13.145	15.150
59598	21	16.636	17.690	59670	11	13.044	23.140					59843	24	5.868	9.828	59915	12	17.146	15.536
59599	19	22.369	17.568	59671	14	17.986	23.712					59844	23	7.164	9.926	59916	22	18.816	15.415
59600	16	24.225	17.460	59672	12	18.102	23.121					59845	11	10.367	9.244	59917*	42	18.959	15.901
59601	10	24.364	17.383	59673	14	20.052	23.087					59846	18	16.803	9.762	59918	24	20.772	15.774
59602	12	0.536	18.314	59674	10	22.912	23.498					59847	17	18.767	9.864	59919	31	21.945	15.338
59603*	30	1.328	18.377	59675	11	24.138	23.338					59848	16	19.140	9.915	59920	13	2.326	16.534
59604	10	2.570	18.806	59676	24	24.168	23.670					59849	12	22.132	9.670	59921	22	2.838	16.045
59605	11	2.962	18.240	59677	10	24.521	23.240					59850	14	22.876	9.398	59922	14	4.216	16.685
59606	23	3.190	18.740	59678	19	0.826	24.450					59851	23	22.981	9.910	59923*	116	4.892	16.425
59607	18	3.409	18.807	59679	11	1.270	24.072					59852	12	0.395	10.345	59924	27	7.296	16.033
59608	16	5.408	18.034	59680	12	9.068	24.232					59853	20	1.301	10.968	59925	11	7.898	16.652
59609	20	6.600	18.239	59681	24	9.478	24.084					59854	10	4.296	10.918	59926	11	10.046	16.218
59610	18	12.384	18.920	59682	12	10.504	24.869					59855	9	7.532	10.291	59927	18	11.488	16.778
59611	12	15.884	18.989	59683	26	12.386	24.136					59856	24	14.326	10.692	59928	11	12.449	16.777
59612	21	17.062	18.430	59684	13	13.009	24.004					59857*	44	16.668	10.871	59929	11	16.854	16.900
59613	11	17.489	18.770	59685	11	19.613	24.868					59858	13	18.408	10.784	59930	12	24.534	16.698
59614	11	1.300	19.102	59686	11	23.503	24.907					59859	19	18.630	10.020	59931	26	0.186	17.807
59615	15	2.686	19.759	59687	26	1.734	25.718					59860*	40	20.656	10.504	59932	21	2.042	17.682
59616	11	9.373	19.653	59688	13	3.082	25.464					59861	11	23.294	10.291	59933	15	6.198	17.736
59617	10	12.196	19.144	59689	15	5.940	25.450					59862	16	23.322	10.486	59934	13	8.900	17.840
59618	11	18.165	19.302	59690	14	9.072	25.064					59863	19	23.494	10.395	59935	15	9.670	17.612
59619	12	19.946	19.263	59691	10	12.226	25.288					59864*	76	23.563	10.738	59936	12	11.886	17.708
59620	21	20.186	19.610	59692	15	13.280	25.230					59865	18	24.486	10.082	59937	12	13.997	17.169
59621	25	20.276	19.532	59693*	34	13.346	25.092					59866	28	3.858	11.578	59938	15	17.850	17.866
59622	17	20.488	19.355	59694	15	13.418	25.350					59867	17	4.656	11.600	59939	16	20.450	17.928
59623	10	21.127	19.553	59695	14	16.014	25.394					59868	12	5.124					



59950	11	13.650	19.727	60022	16	9.874	25.545	60088	18	21.210	3.142	60160	30	19.106	10.534	60232	22	6.798	18.601
59951	20	15.581	19.095	60023	36	10.636	25.012	60089	38	4.284	4.922	60161	14	24.363	10.604	60233	11	7.900	18.854
59952	22	16.540	19.225	60024	32	13.070	25.774	60090	11	5.814	4.650	60162	28	25.558	10.295	60234	32	11.000	18.292
59953	30	24.246	19.131	60025	18	13.154	25.076	60091	15	10.106	4.456	60163	13	4.607	11.888	60235	13	13.141	18.733
59954	12	24.320	19.762	60026	28	16.140	25.776	60092	24	10.788	4.130	60164	11	6.655	11.860	60236	13	16.499	18.824
59955	14	25.496	19.364	60027	23	17.450	25.199	60093	32	10.935	4.865	60165	11	10.261	11.180	60237	28	16.886	18.268
59956	36	6.112	20.034	60028	22	17.622	25.534	60094	16	11.871	4.390	60166	27	10.594	11.677	60238	31	1.600	19.092
59957	15	7.269	20.528	60029	33	18.384	25.076	60095	32	0.013	5.645	60167	30	17.488	11.480	60239	16	2.842	19.318
59958	11	15.824	20.932	60030	25	20.818	25.244	60096	31	2.924	5.746	60168	26	22.644	11.650	60240	28	4.496	19.726
59959	36	0.420	21.374	60031	42	22.306	25.783	60097	12	3.136	5.784	60169	30	24.114	11.720	60241*	40	8.645	19.518
59960	12	1.860	21.862	60032	11	23.312	25.635	60098	10	3.414	5.882	60170	18	24.204	11.736	60242*	44	11.120	19.724
59961	30	3.192	21.606					60099	35	8.634	5.094	60171	30	8.942	12.340	60243	10	15.794	19.482
59962	27	8.334	21.990					60100	31	13.326	5.184	60172	18	11.309	12.348	60244	33	21.397	19.036
59963	17	8.484	21.842					60101	28	14.036	5.469	60173	17	11.319	12.333	60245	28	23.523	19.022
59964	34	10.608	21.984					60102	17	14.928	5.896	60174	30	12.164	12.896	60246	30	24.726	19.962
59965	20	11.315	21.750					60103*	82	21.578	5.116	60175	27	15.286	12.582	60247	31	25.182	19.720
59966	12	11.840	21.189					60104	31	23.765	5.128	60176	33	15.952	12.634	60248	11	25.590	19.850
59967	20	15.601	21.326					60105	29	2.102	6.266	60177	25	18.116	12.364	60249	12	7.435	20.538
59968	11	16.390	21.246					60106	12	2.834	6.764	60178	30	20.212	12.004	60250	12	10.658	20.881
59969	18	16.461	21.055					60107	32	3.166	6.060	60179	26	23.100	12.273	60251	28	11.639	20.262
59970	17	17.362	21.302					60108	14	3.786	6.804	60180	29	1.276	13.916	60252	29	19.188	20.766
59971	24	18.294	21.283					60109*	43	4.554	6.398	60181*	43	1.504	13.407	60253*	58	22.308	20.256
59972	15	23.210	21.078					60110	21	7.115	6.496	60182*	38	1.526	13.896	60254	12	24.616	20.984
59973	16	23.364	21.833					60111	27	11.316	6.958	60183	25	2.130	13.466	60255	13	0.584	21.033
59974	14	25.090	21.520					60112	12	16.481	6.412	60184	36	7.225	13.864	60256	14	0.738	21.779
59975	13	1.414	22.742					60113	35	18.354	6.941	60185*	100	7.412	13.516	60257	11	2.449	21.458
59976	20	2.095	22.604					60114	27	22.444	6.356	60186	17	9.816	13.746	60258	13	21.435	21.450
59977	30	2.750	22.285					60115	31	0.006	7.114	60187	28	14.624	13.722	60259	24	21.603	21.424
59978	14	3.406	22.314					60116	18	1.194	7.888	60188	21	21.244	13.406	60260	19	5.914	22.005
59979	40	5.480	22.440					60117	15	1.644	7.726	60189	24	21.985	13.134	60261	35	9.530	22.534
59980	25	6.664	22.490					60118	14	4.682	7.550	60190	28	24.651	13.564	60262*	44	18.188	22.718
59981	13	8.118	22.220					60119	27	5.694	7.060	60191	23	25.339	13.847	60263	43	25.999	22.555
59982	11	8.564	22.481					60120	24	7.276	7.633	60192*	42	2.715	14.435	60264	31	1.173	23.268
59983	13	9.108	22.912					60121	30	9.616	7.949	60193	14	5.372	14.487	60265	21	1.856	23.786
59984	10	9.489	22.068					60122	29	12.088	7.200	60194	12	7.460	14.114	60266	19	11.346	23.322
59985	17	9.600	22.776					60123	33	14.366	7.626	60195	15	16.893	14.396	60267	19	18.134	23.586
59986	10	9.923	22.338					60124	10	18.665	7.520	60196	15	17.925	14.725	60268	30	20.295	23.562
59987	22	9.975	22.252					60125	25	20.066	7.760	60197	26	18.241	14.450	60269*	45	20.552	23.292
59988	16	11.214	22.887					60126	15	20.221	7.796	60198	21	19.092	14.614	60270	10	23.346	23.639
59989	12	13.504	22.662					60127	16	21.286	7.752	60199*	35	22.540	14.682	60271	15	23.388	23.188
59990	24	15.876	22.264					60128	33	23.816	7.510	60200	15	5.594	15.493	60272	28	24.058	23.422
59991	14	19.580	22.639					60129*	39	3.406	8.508	60201	30	8.966	15.702	60273*	48	10.130	24.075
59992	17	21.503	22.566					60130	21	6.692	8.016	60202	14	13.924	15.690	60274	34	12.955	24.776
59993*	45	21.728	22.832					60131	29	8.424	8.687	60203	35	14.477	15.734	60275	30	13.331	24.356
59994	12	0.788	23.734					60132	15	11.915	8.569	60204	30	19.004	15.365	60276	22	22.085	24.108
59995	31	2.044	23.894					60133	15	14.647	8.408	60205	11	19.820	15.026	60277	19	25.020	24.568
59996	11	2.393	23.460					60134	23	15.146	8.235	60206	13	4.452	16.416	60278	30	5.093	25.710
59997	11	4.768	23.477					60135	18	17.916	8.774	60207*	36	6.620	16.193	60279	20	6.494	25.164
59998	12	5.886	23.428					60136	32	22.504	8.056	60208*	38	7.731	16.090	60280	21	6.854	25.420
59999	28	7.548	23.374					60137	31	0.300	9.954	60209	10	8.291	16.507	60281	19	7.022	25.522
60000	20	7.596	23.583					60138	29	5.223	9.676	60210	16	8.551	16.425	60282	26	10.872	25.428
60001*	49	8.774	23.979					60139	33	6.982	9.072	60211	26	9.060	16.598	60283	33	11.926	25.907
60002	20	11.700	23.208					60140	24	16.702	9.958	60212	26	10.133	16.902	60284	30	13.390	25.062
60003	19	14.297	23.234					60141*	39	17.656	9.100	60213	12	11.906	16.774	60285	45	17.393	25.466
60004	11	20.036	23.044					60142	31	20.079	9.100	60214	15	12.768	16.565	60286	14	19.595	25.741
60005	12	22.144	23.354					60143	10	21.133	9.374	60215	16	16.090	16.514	60287	40	20.548	25.662
60006	24	23.794	23.336					60144	18	0.645	10.525	60216	11	16.736	16.550	60288	30	22.656	25.159
60007	17	24.480	23.862					60145	26	0.814	10.432	60217	28	20.470	16.255				
60008	12	5.318	24.416					60146*	58	0.879	10.774	60218*	43	22.952	16.822				
60009	20	6.415	24.774					60147	20	1.795	10.117	60219	30	23.292	16.324				
60010	16	7.115	24.804					60148	32	4.000	10.903	60220	11	23.650	16.565				
60011	19	8.164	24.107					60149	19	4.526	10.248	60221	16	25.444	16.232				
60012*	45	10.202	24.192					60150	16	6.342	10.272	60222	10	0.166	17.063				
60013	21	16.833	24.100					60151	31	6.380	10.784	60223	25	1.607	17.578				
60014*	64	18.930	24.780					60152	30	9.878	10.002	60224	16	3.980	17.312				
60015	10	0.529	25.584					60153*	40	10.452	10.627	60225	14	10.112	17.298				
60016	35	0.933	25.980					60154*	33	10.481	10.741	60226	34	10.776	17.936				
60017	13	1.394	25.136					60155	27	11.126	10.439	60227	34	24.862	17.804				
60018	12	2.294	25.686					60156	26	11.474	10.010	60228	10	0.502	18.482				
60019	11	4.336	25.132					60157	10	12.898	10.933	60229	10	0.925	18.161				
60020*	82	6.542	25.316					60158	22	16.484	10.631	60230	14	5.084	18.126				
60021	19	8.966	25.456					60159	27	17.780	10.584	60231	21	5.435	18.88				



**R.A. 21<sup>h</sup> 56<sup>m</sup>**

Plate 1286 ; 1918 Nov. 22.

*Provisional Constants.*

A	B	C
-01767	+00826	-1944

D	E	F
-00793	-01765	-0790

 $\text{Mag.} = 16.2 - 1.09\sqrt{d}$ 

No.	d	x	y
60301	12	2.714	0.675
60302	24	3.047	0.944
60303	18	9.799	0.490
60304*	60	12.111	0.770
60305*	38	13.396	0.046
60306	11	17.554	0.448
60307	12	20.442	0.978
60308	10	1.796	1.722
60309	25	8.852	1.660
60310	23	12.878	1.620
60311	19	13.662	1.478
60312	18	14.195	1.346
60313	13	14.796	1.212
60314	16	18.976	1.691
60315	11	19.008	1.816
60316*	30	21.774	1.221
60317	33	21.885	1.420
60318*	40	3.073	2.046
60319	19	6.835	2.178
60320	21	14.650	2.812
60321	22	15.400	2.599
60322	10	22.208	2.490
60323*	31	23.203	2.900
60324	11	11.436	3.405
60325	15	12.158	3.781
60326	18	22.238	3.759
60327	16	23.169	3.438
60328	24	24.618	3.376
60329	12	7.852	4.140
60330*	48	20.174	4.263
60331	22	22.463	4.440
60332	30	23.275	4.148
60333	21	1.577	5.310
60334	15	5.443	5.344
60335*	70	14.575	5.316
60336	19	14.850	5.654
60337	14	18.448	5.272
60338	24	18.965	5.570
60339	14	0.266	6.574
60340*	40	6.938	6.445
60341	11	8.169	6.280
60342	12	11.640	6.792
60343	12	17.378	6.470
60344	23	18.195	6.770
60345	30	1.670	7.709
60346	24	7.357	7.910
60347	31	7.404	7.214
60348	14	23.676	7.156
60349*	20	24.994	7.654
60350	28	25.010	7.608
60351	20	0.354	8.284
60352	22	4.634	8.656
60353*	33	7.303	8.860
60354	18	11.650	8.735
60355	13	18.220	8.060

60356	10	21.318	8.127	60428	11	22.494	19.352
60357	11	8.064	9.508	60429	16	23.358	19.037
60358	12	8.960	9.078	60430	23	24.176	19.412
60359	11	11.808	9.020	60431	11	24.720	19.278
60360	12	17.962	9.906	60432*	57	0.377	20.578
60361	13	21.295	9.360	60433	22	2.814	20.243
60362	11	21.873	9.889	60434	13	3.680	20.114
60363	13	25.273	9.927	60435	20	13.228	20.982
60364	12	2.276	10.817	60436	20	22.076	20.389
60365	21	3.476	10.483	60437	12	2.724	21.274
60366	11	9.167	10.354	60438	13	6.458	21.576
60367	18	0.562	11.904	60439	12	9.100	21.050
60368	18	2.046	11.947	60440	13	9.209	21.843
60369	12	2.138	11.963	60441	18	11.919	21.468
60370	15	6.100	11.584	60442*	40	11.960	21.954
60371	19	9.888	11.630	60443	24	18.913	21.336
60372	19	18.199	11.450	60444	17	22.816	21.080
60373	14	20.306	11.712	60445*	38	4.140	22.834
60374	12	20.308	11.170	60446*	40	6.075	22.088
60375	38	20.510	11.693	60447	17	7.416	22.750
60376	13	22.420	11.890	60448	28	15.865	22.790
60377	15	1.032	12.523	60449	20	17.936	22.219
60378	13	9.259	12.528	60450	12	18.160	22.982
60379	24	11.092	12.736	60451	13	18.204	22.474
60380	20	20.182	12.860	60452	24	22.741	22.528
60381	15	21.230	12.705	60453	15	1.522	23.518
60382	17	2.622	13.796	60454	19	2.206	23.740
60383*	40	4.110	13.105	60455	30	7.242	23.850
60384	19	10.490	13.940	60456	20	16.726	23.670
60385	24	11.842	13.525	60457	20	16.883	23.230
60386	13	15.559	13.801	60458	14	0.224	24.466
60387	18	23.654	13.357	60459	16	3.192	24.878
60388*	30	0.509	14.960	60460	10	6.806	24.525
60389	16	3.318	14.070	60461	22	7.037	24.514
60390	20	7.519	14.558	60462	15	8.428	24.119
60391	12	10.285	14.439	60463	19	10.730	24.430
60392	10	15.350	14.453	60464	13	11.560	24.094
60393	11	24.232	14.334	60465	13	15.258	24.190
60394*	60	24.690	14.362	60466	22	15.289	24.220
60395	17	4.860	15.875	60467	20	17.640	24.726
60396	22	8.632	15.292	60468	25	25.736	24.008
60397	20	8.826	15.416	60469	24	0.822	25.518
60398	18	19.262	15.754	60470	47	5.326	25.475
60399	20	21.880	15.878	60471	13	7.224	25.802
60400	12	24.440	15.446	60472	28	15.615	25.940
60401	21	1.298	16.600	60473	20	15.944	25.059
60402	15	3.466	16.470				
60403	12	5.984	16.798				
60404	10	6.182	16.581				
60405	20	16.552	16.030				
60406	24	17.624	16.102				
60407	13	22.706	16.388				
60408*	40	23.057	16.305				
60409*	42	0.965	17.111				
60410	11	4.811	17.692				
60411	11	8.412	17.812				
60412	10	14.812	17.978				
60413	30	15.508	17.855				
60414	12	17.872	17.466				
60415	10	19.540	17.918				
60416	10	23.160	17.790				
60417*	34	24.975	17.464				
60418	11	25.096	17.283				
60419	25	2.910	18.064				
60420	20	9.264	18.860				
60421	23	13.126	18.586				
60422	13	1.581	19.316				
60423	23	3.264	19.991				
60424	10	11.744	19.928				
60425	14	18.677	19.284				
60426	20	19.820	19.758				
60427*	40	22.082	19.156				

**R.A. 22<sup>h</sup> 4<sup>m</sup>**

Plate 1141 ; 1917 Nov. 17.

*Provisional Constants.*

A	B	C
-02544	+01095	-3150

D	E	F
-01037	-02542	+0470

 $\text{Mag.} = 16.4 - 1.09\sqrt{d}$ 

No.	d	x	y
60501	10	0.757	0.152
60502	16	8.918	0.268
60503	16	9.120	0.772
60504	29	15.049	0.488

60505	16	19.678	0.972	60577	26	6.765	10.127
60506	25	15.626	1.086	60578	23	16.342	10.641
60507	14	15.818	1.788	60579	12	20.336	10.552
60508	18	15.916	1.618	60580	20	22.094	10.494
60509	31	17.198	1.415	60581	13	6.131	11.946
60510	10	20.405	1.558	60582	19	7.773	11.683
60511	13	21.554	1.791	60583	32	8.943	11.498
60512	16	21.863	1.850	60584	40	12.434	11.820
60513	19	24.886	1.952	60585*	48	12.463	11.907
60514	12	10.688	2.958	60586	32	14.504	11.082
60515	19	12.438	2.460	60587	16	15.126	11.235
60516	14	16.732	2.394	60588	29	16.986	11.192
60517	16	18.754	2.522	60589	19	20.912	11.142
60518	22	21.048	2.136	60590	24	22.298	11.492
60519	20	0.654	3.712	60591	19	23.044	11.939
60520*	33	0.682	3.180	60592*	38	24.232	11.928
60521	10	0.864	3.812	60593	16	0.026	12.112
60522	30	2.094	3.631	60594	11	1.372	12.252
60523	31	5.473	3.858	60595	19	6.938	12.127
60524	12	5.598	3.935	60596	20	7.910	12.678
60525	10	5.707	3.352	60597*	128	11.122	12.718
60526	11	5.966	3.476	60598	19	11.242	12.482
60527	24	23.452	3.773	60599*	53	11.448	12.308
60528	20	24.793	3.480	60600	19	12.256	12.715
60529	31	0.770	4.414	60601*	36	18.558	12.837
60530	23	4.034	4.472	60602	14	18.726	12.914
60531	18	4.770	4.418	60603	17	20.026	12.812
60532	31	8.662	4.770	60604	29	21.828	12.668
60533*	47	8.999	4.708	60605	22	1.274	13.548
60534	18	14.638	4.550	60606	19	5.214	13.528
60535	10	19.385	4.286	60607	10	8.807	13.552
60536	11	20.497	4.333	60608	16	13.644	13.344
60537	40	3.735	5.122	60609	15	21.522	13.202
60538	12	6.198	5.234	60610	33	23.070	13.328
60539*	43	7.984	5.854	60611	34	25.170	13.662
60540	30	9.493	5.784	60612	18	1.862	14.511
60541	11	9.595	5.046	60613*	61	2.310	14.533
60542*	32	11.007	5.452	60614	29	6.199	14.482
60543*	40	13.690	5.518	60615	11	17.581	14.332
60544	20	17.417	5.660	60616*	36	17.939	14.428
60545	13	17.960	5.862	60617	18	23.503	14.012
60546	11	18.574	5.278	60618	21	2.084	15.608
60547	22	18.864	5.176	60619	22	5.254	15.181
60548	16	20.186	5.302	60620	13	17.707	15.498
60549	20	21.564	5.112	60621	12	21.263	15.730
60550	11	4.954	6.292	60622	17	0.378	16.570
60551	21	10.231	6.672	60623*	38	0.721	16.481
60552*	41	14.174	6.548	60624	26	4.390	16.068
60553*	35	18.888	6.284	60625	10	5.858	16.462
60554*	44	21.022	6.923	60626	20	11.299	16.104
60555	22	1.208	7.396	60627	23	11.866	16.483
60556*	30	2.524	7.872	60628	19	20.140	16.664
60557	36	2.539	7.828	60629	15	0.846	17.952
60558	15	3.086	7.400	60630*	39	2.641	17.605
60559	11	3.406	7.583	60631	20	2.762	17.425
60560	16	5.732	7.921	60632	29	4.583	17.240
60561	12	5.920	7.966	60633	30	4.658	17.438
60562	18	7.251	7.258	60634	13	6.656	17.298
60563	17	9.110	7.639	60635	21	6.756	17.640
60564	12	11.819	7.312	60636	23	10.700	17.471
60565	11	13.651	7.530	60637	39	14.338	17.426
60566	22	18.696	7.316	60638	24	16.086	17.200
60567	18	19.374	7.064	60639	12	17.502	17.242
60568	27	20.512	7.636	60640*	39	17.572	17.433
60569	23	19.646	8.426	60641	16	18.586	17.800
60570*	36	20.321	8.106	60642	18	18.845	17.309
60571	23	8.065	9.300	60643	30	20.780	17.770
60572	26	20.644	9.528	60644	28	21.083	17.782
60573	20	2.834	10.124	60645	37	25.925	17.133
60574	24	4.168	10.360	60646	11	2.344	18.560
60575	10	4.379	10.736	60647	13	6.896	18.412
60576	21	5.920	10.683	60648	19	9.066	18.862



**R.A. 22<sup>h</sup> 12<sup>m</sup>**

Plate 1148; 1917 Dec 2.

*Provisional Constants.*

A	B	C
-02542	+00999	-1174

D	E	F
-00898	-02560	-0224

 $\text{Mag.} = 15.9 - 1.09\sqrt{d}$ 

No.	d	x	y
60751	22	7.504	0.899
60752	11	14.388	0.924
60753*	40	19.585	0.396
60754*	35	9.042	1.032
60755	16	18.273	1.634
60756	12	2.836	2.095
60757	12	11.094	2.228
60758	13	1.416	3.930
60759	13	2.758	3.624
60760*	28	4.600	3.752
60761	11	8.642	3.065
60762	11	6.037	4.170
60763	19	6.496	4.748
60764	12	15.652	4.948
60765	13	15.658	4.930
60766	20	17.212	4.182
60767	13	21.282	4.534
60768	18	25.080	4.246
60769	20	6.440	5.880
60770	21	6.813	5.855
60771	22	8.200	5.954
60772	19	10.608	5.560
60773	15	14.296	5.411
60774	15	16.065	5.224
60775	22	20.960	5.040
60776	11	22.654	5.276
60777	20	7.501	6.354
60778	19	10.206	6.425
60779	20	10.264	6.406
60780	13	12.915	6.276
60781*	35	14.426	6.464
60782	14	23.736	6.903
60783	14	13.202	7.006
60784	12	21.738	7.677
60785	18	24.774	7.627
60786	31	24.855	7.205
60787*	27	7.850	8.362
60788*	41	12.902	8.580
70789	20	14.144	8.986
60790	11	5.535	9.022
60791	16	10.175	9.416
60792	10	10.302	9.776
60793	23	19.154	9.514
60794	12	20.174	9.694
60795	18	15.931	10.498
60796	17	17.655	10.854
60797	10	22.076	10.729
60798	21	25.238	10.689
60799	11	0.336	11.656
60800	10	8.626	11.588
60801	10	21.186	11.834
60802	10	25.227	11.375
60803	12	1.092	12.096
60804*	27	2.274	12.075
60805	12	7.492	12.164

60806	20	7.892	12.482
60807*	38	23.616	12.588
60808	12	23.874	12.380
60809	21	1.128	13.485
60810	24	3.231	13.800
60811	20	6.279	13.166
60812	11	7.066	13.632
60813	12	7.416	13.345
60814	14	14.074	13.584
60815	10	15.176	13.380
60816	11	18.527	13.124
60817*	37	5.172	14.835
60818	16	8.525	14.715
60819	19	10.654	14.272
60820	13	15.883	15.410
60821	10	16.060	15.048
60822	18	20.855	15.478
60823	24	21.155	15.282
60824	16	21.702	15.933
60825	16	21.976	15.041
70826*	24	5.485	16.061
60827	29	12.344	16.026
60828	20	15.118	16.216
60829	12	20.480	16.222
60830	11	24.176	16.786
60831	27	4.022	17.262
60832	15	10.538	17.960
60833	14	10.573	17.273
60834	20	11.406	17.392
60835	12	15.554	17.775
60836	11	17.732	17.172
60837	11	18.501	17.131
60838	20	18.532	17.012
60839	10	20.252	17.606
60840	11	21.392	17.326
60841	12	1.187	18.657
60842	12	5.026	18.745
60843	11	5.338	18.861
60844	21	13.928	18.877
60845	12	15.616	18.634
60846	20	15.811	18.645
60847	20	2.027	19.694
60848	23	2.304	19.705
60849	37	8.412	19.120
60850	11	9.088	19.674
60851	24	9.164	19.794
60852	13	9.282	19.170
60853	21	16.258	19.508
60854	12	3.522	20.615
60855	22	14.995	20.716
60856*	35	21.175	20.746
60857	20	21.289	20.255
60858	24	4.061	21.164
60859*	73	4.111	21.340
60860	11	5.545	21.656
60861	14	11.705	21.236
60862	22	1.698	22.867
60863	15	8.248	22.201
60864	14	11.294	22.974
60865	13	3.076	23.724
60866	11	6.244	23.560
60867	12	9.146	23.485
60868	15	11.178	23.784
60869	31	12.505	23.065
60870	52	25.275	23.454
60871	13	4.460	24.792
60872	19	5.126	24.714
60873	10	5.464	24.066
60874	22	5.762	24.456
60875	11	9.387	24.296
60876	28	9.700	24.616
60877	12	10.296	24.376

60878	14	17.854	24.818
60879	24	19.055	24.012
60880	24	0.676	25.745
60881	36	1.716	25.201
60882	15	4.884	25.684
60883	12	6.664	25.947
60884	17	6.914	25.342
60885	45	7.512	25.906
60886	11	9.554	25.600
60887	33	15.596	25.524

**R.A. 22<sup>h</sup> 20<sup>m</sup>**

Plate 1151; 1917 Dec. 3.

*Provisional Constants.*

A	B	C
-02498	+00919	-2080

D	E	F
-00822	-02535	+2194

 $\text{Mag.} = 16.5 - 1.09\sqrt{d}$ 

No.	d	x	y
60901	30	3.086	0.344
60902	35	12.558	0.096
60903	34	15.870	0.604
60904	24	16.766	0.302
60905	12	0.680	1.407
60906	21	7.361	1.672
60907	14	12.768	1.128
60908*	45	14.529	1.385
60909	10	14.624	1.983
60910*	46	15.404	1.408
60911	12	22.697	1.674
60912	14	22.858	1.748
60913	31	7.596	2.756
60914*	50	10.113	2.275
60915	14	10.612	2.308
60916	33	16.387	2.696
60917	22	4.206	3.574
60918	24	8.690	3.989
60919	30	11.172	3.285
60920*	36	15.604	3.671
60921*	40	18.075	3.176
60922	29	21.682	3.462
60923	28	2.776	4.664
60924	31	8.303	4.724
60925	14	9.602	4.418
60926*	35	16.830	4.448
60927	12	17.067	4.736
60928	10	19.094	4.307
60929	35	22.065	4.032
60930	13	0.362	5.722
60931	14	3.784	5.592
60932	16	9.984	5.814
60933	13	13.594	5.467
60934	34	17.816	5.037
60935	19	18.085	5.236
60936	18	20.042	5.004
60937	24	24.366	5.629
60938	14	6.568	6.440

60939	14	9.714	6.400
60940	34	10.355	6.640
60941	15	13.454	6.682
60942	27	21.080	6.876
60943	12	22.427	6.018
60944	25	23.726	6.988
60945	25	1.464	7.336
60946	37	2.584	7.628
60947	27	5.116	7.606
60948	31	5.254	7.907
60949	11	8.750	7.349
60950	12	9.579	7.922
60951	11	10.411	7.950
60952	29	12.800	7.492
60953*	53	14.966	7.118
60954	14	23.715	7.054
60955	21	23.929	7.336
60956	28	2.504	8.052
60957	24	6.492	8.122
60958	15	6.954	8.168
60959	16	10.228	8.124
60960	18	14.200	8.006
60961	26	16.200	8.160
60962*	36	19.889	8.596
60963	10	2.546	9.690
60964	31	9.081	9.527
60965	16	12.995	9.068
60966	14	16.771	9.068
60967	27	19.672	9.228
60968	39	4.046	10.326
60969	30	5.530	10.552
60970	12	5.738	10.805
60971	12	9.586	10.831
60972	12	11.074	10.100
60973	12	12.054	10.479
60974	20	19.375	10.356
60975	27	22.610	10.816
60976	36	25.176	10.686
60977	19	3.005	11.106
60978	24	5.500	11.243
60979	23	7.972	11.426
60980	13	8.725	11.325
60981*	44	14.383	11.180
60982	12	19.779	11.904
60983	33	24.386	11.344
60984	35	25.474	11.796
60985	21	1.656	12.812
60986	13	7.836	12.686
60987	17	9.481	12.549
60988	15	14.306	12.976
60989	10	16.998	12.452
60990	24	17.458	12.402
60991	24	21.951	12.844
60992	12	22.115	12.718
60993*	46	1.396	13.024
60994	15	6.964	13.266
60995	12	9.468	13.130
60996*	51	14.974	13.613
60997	21	22.512	13.957
60998	12	23.380	13.149
60999	34	12.760	14.934
61000	25	15.186	14.665
61001	12	15.188	14.688
61002	35	15.432	14.914
61003*	41	16.217	14.634
61004	17	18.964	14.896
61005	16	24.905	14.631
61006	11	1.482	15.934
61007	12	6.970	15.966
61008	29	9.194	15.726
61009	29	13.436	15.132
61010	14	15.605	15.821



61011*	40	22.024	15.464	61083	17	15.994	24.471	61141	28	16.485	6.226	61213	24	10.084	18.457	61310	9	10.758	1.566
61012	26	25.156	15.032	61084	15	20.546	24.384	61142	17	1.550	7.218	61214	18	18.870	18.008	61311*	33	19.412	1.390
61013	22	6.706	16.448	61085	25	4.578	25.362	61143	18	1.565	7.150	61215	28	22.260	18.699	61312	20	25.162	1.178
61014	17	10.012	16.646	61086	32	9.549	25.027	61144	18	1.770	7.406	61216	26	2.230	19.129	61313	22	10.594	2.110
61015	14	14.374	16.924	61087	41	10.786	25.702	61145	21	4.635	7.344	61217	25	2.411	19.204	61314*	42	19.230	2.308
61016	28	4.356	17.675	61088	28	12.399	25.733	61146	18	15.780	7.448	61218	25	3.518	19.055	61315	19	4.032	3.062
61017	13	9.869	17.102	61089	12	16.208	25.602	61147	15	16.674	7.207	61219	34	6.392	19.714	61316	10	10.310	3.040
61018	14	10.414	17.496	61090	15	23.959	25.588	61148	13	17.864	7.078	61220	12	7.229	19.524	61317	18	13.248	3.587
61019*	34	12.026	17.838					61149	21	5.100	8.620	61221	19	8.301	19.758	61318	31	13.328	3.372
61020	31	22.258	17.608					61150	19	8.401	8.120	61222	20	9.578	19.366	61319	14	14.391	3.818
61021	36	24.854	17.434					61151	20	9.141	8.933	61223	16	10.470	19.724	61320	27	17.944	3.581
61022	31	25.148	17.566					61152	17	9.774	8.261	61224*	42	15.418	19.364	61321	8	23.956	3.165
61023	12	25.686	17.960					61153*	39	16.174	8.629	61225	14	24.922	19.536	61322	17	1.752	4.773
61024	12	1.456	18.418					61154	21	17.658	8.836	61226	25	25.928	19.650	61323	8	1.836	4.125
61025	15	7.910	18.974					61155	20	19.350	8.035	61227	14	4.298	20.386	61324*	49	6.194	4.666
61026	26	8.184	18.834					61156	23	20.836	8.856	61228	19	10.790	20.764	61325	23	8.177	4.462
61027	18	11.765	18.396					61157*	40	21.322	8.674	61229	22	10.984	20.951	61326*	35	8.812	4.767
61028	36	16.006	18.944					61158	17	5.712	9.173	61230	18	13.686	20.134	61327	16	7.840	5.162
61029	33	16.513	18.794					61159	22	8.436	9.126	61231	28	23.034	20.702	61328	19	9.240	5.028
61030	12	17.700	18.306					61160	24	15.505	9.061	61232*	42	5.648	21.014	61329	9	13.410	5.782
61031	40	17.896	18.052					61161	19	18.540	9.686	61233	17	9.970	21.658	61330*	36	17.678	5.174
61032	15	22.930	18.015					61162	19	23.336	9.223	61234*	33	12.450	21.831	61331	9	2.801	6.800
61033	33	24.244	18.976					61163	16	0.491	10.995	61235	20	16.534	21.451	61332	9	4.744	6.967
61034	33	25.528	18.916					61164	32	3.060	10.831	61236	21	8.341	22.566	61333*	31	8.569	6.540
61035	15	4.533	19.764					61165	17	6.126	10.686	61237	20	4.607	23.647	61334	15	13.549	6.386
61036	12	7.360	19.592					61166	24	8.413	10.350	61238*	48	11.924	23.364	61335	24	20.598	6.605
61037	30	10.344	19.847					61167	19	10.040	10.296	61239*	38	14.694	23.012	61336	15	2.480	7.540
61038	16	16.960	19.888					61168	26	20.536	10.088	61240	22	22.408	23.364	61337	21	5.970	7.080
61039	30	24.421	19.051					61169*	56	21.518	10.214	61241	30	23.506	23.774	61338	23	9.176	7.620
61040	16	0.866	20.212					61170	24	2.276	11.500	61242	16	6.100	24.694	61339	17	16.128	7.886
61041	26	5.753	20.653					61171*	28	3.367	11.936	61243*	38	6.606	24.501	61340	32	17.123	7.590
61042	11	6.837	20.173					61172	21	6.520	11.334	61244	18	12.588	24.421	61341	25	4.124	8.272
61043	31	9.048	20.776					61173	19	8.183	11.514	61245	16	25.038	24.661	61342	9	7.378	8.553
61044	18	13.797	20.062					61174	19	10.792	11.903	61246	17	1.050	25.816	61343	18	12.992	8.032
61045	37	14.756	20.919					61175	23	16.184	11.654	61247	22	2.037	25.744	61344	31	19.359	8.390
61046	28	16.866	20.286					61176*	40	17.484	11.928	61248	41	14.785	25.018	61345	30	20.398	8.429
61047	17	17.402	20.797					61177	13	6.252	12.048	61249	32	15.368	25.040	61346	11	22.098	8.060
61048	29	18.100	20.538					61178	20	16.205	12.692	61250	30	15.857	25.967	61347	33	25.493	8.206
61049	11	19.173	20.773					61179	17	17.490	12.598	61251	18	22.080	25.426	61348	16	1.090	9.250
61050	24	21.120	20.088					61180	15	19.210	12.964					61349	20	3.965	9.138
61051	29	9.138	21.954					61181	17	1.291	13.316					61350	29	17.476	9.783
61052	31	11.186	21.546					61182*	30	6.358	13.124					61351	28	6.707	10.662
61053	31	11.524	21.019					61183	24	7.345	13.664					61352	15	14.810	10.273
61054	37	14.820	21.906					61184	22	7.620	13.770					61353	31	17.150	10.188
61055	29	16.850	21.898					61185	23	11.656	13.406					61354*	47	19.680	10.276
61056*	40	17.398	21.774					61186	15	13.056	13.930					61355	14	22.090	10.282
61057	21	17.646	21.582					61187	21	16.216	13.787					61356	10	3.395	11.446
61058	12	20.590	21.396					61188	20	23.404	13.806					61357	13	9.162	11.009
61059	11	2.698	22.113					61189	24	0.436	14.134					61358	19	13.751	11.111
61060	21	4.464	22.524					61190	18	2.837	14.776					61359	25	18.676	11.848
61061*	43	4.956	22.868					61191	20	8.466	14.886					61360	22	25.140	11.451
61062	27	10.805	22.674					61192	15	10.096	14.216					61361	13	6.548	12.043
61063	23	15.256	22.852					61193	15	23.440	14.905					61362	11	7.047	12.519
61064	30	16.713	22.282					61194	22	24.364	14.815					61363	27	8.352	12.222
61065*	44	17.078	22.684					61195	21	3.097	15.174					61364	14	13.586	12.514
61066	12	17.554	22.697					61196	15	5.280	15.460					61365*	37	14.342	12.105
61067	26	18.357	22.208					61197	21	9.156	15.906					61366	17	1.196	13.830
61068	18	18.697	22.892					61198	17	10.466	15.096					61367	10	10.458	13.839
61069*	60	3.174	23.871					61199*	48	14.774	15.099					61368	16	11.283	13.531
61070	10	11.075	23.994					61200	21	24.364	15.352					61369	25	11.697	13.974
61071	21	12.917	23.682					61201	15	8.526	16.355					61370	20	12.430	13.670
61072	16	14.475	23.986					61202	21	9.656	16.426					61371*	46	13.843	13.568
61073	15	15.172	23.567					61203	24	0.228	17.786					61372	19	17.270	13.682
61074*	48	17.526	23.898					61204	28	2.824	17.582					61373	11	1.244	14.930
61075	14	17.834	23.527					61205	21	3.124	17.710					61374	24	2.164	14.833
61076	10	18.893	23.852					61206	19	7.227	17.774					61375	21	4.830	14.401
61077	11	19.845	23.724					61207	23	18.515	17.464					61376	8	9.728	14.602
61078	12	20.982	23.516					61208	16	20.466	17.199					61377	12	21.099	14.379
61079	17	5.781	24.334					61209*	36	22.455	17.414					61378	16	25.892	14.778
61080	17	6.103	24.482					61210	23	0.910	18.188					61379	15	2.171	15.368
61081	20	13.643	24.575					61211	15	3.666	18.096					61380	18	3.958	15.852
61082	15	15.025	24.614					61212	22	5.566	18.370					61381	19	11.529	15.199

R.A. 22<sup>h</sup> 28<sup>m</sup>

Plate 1155; 1917 Dec. 4.

Provisional Constants.



61382	8	12.663	15.202	<div>R.A. 22<sup>h</sup> 44<sup>m</sup></div> <div>Plate 1138; 1917 Nov. 9.</div> <div>Provisional Constants.</div> <div>A B C</div> <div>−.02596 +.00944 −.2502</div> <div>D E F</div> <div>−.00904 −.02571 −.2644</div> <div>Mag.=16.9−1.09√d</div>	61506	24	14.850	9.748	61578	16	11.257	20.515	61669	26	0.072	3.957
61383	13	14.338	15.320		61507	16	15.063	9.880	61579	11	22.744	20.988	61670	15	2.278	3.311
61384	32	19.201	15.411		61508	13	18.110	9.972	61580	77	25.654	20.504	61671	24	8.372	3.305
61385	8	0.724	16.817		61509	47	19.097	9.920	61581	14	3.858	21.374	61672	12	8.700	3.671
61386	27	4.230	16.954		61510	29	20.076	9.834	61582	12	6.274	21.937	61673	24	8.922	3.376
61387	8	9.743	16.738		61511	35	24.340	9.838	61583	18	14.636	21.782	61674	14	14.438	3.975
61388*	86	18.664	16.695		61512	12	0.695	10.267	61584	12	14.775	21.185	61675*	62	14.740	3.565
61389*	44	22.254	16.576		61513	25	3.924	10.164	61585	22	22.293	21.574	61676	25	14.952	3.709
61390	15	22.434	16.970		61514*	64	4.620	10.208	61586	44	6.226	22.264	61677	13	19.567	3.132
61391	22	23.788	16.010		61515	12	9.690	10.039	61587	13	15.946	22.384	61678	28	4.765	4.963
61392*	32	0.274	17.447	61516	24	15.064	10.873	61588	24	15.950	22.922	61679	16	4.778	4.286	
61393*	27	5.253	17.139	61517	24	15.965	10.090	61589	22	21.558	22.426	61680	13	5.244	4.455	
61394	31	5.308	17.400	61518	21	17.793	10.127	61590	10	8.806	23.929	61681	13	5.963	4.545	
61395	13	6.011	17.352	61519	26	3.000	11.323	61591	21	11.223	23.598	61682	13	10.146	4.882	
61396*	30	10.816	17.462	61520	23	3.880	11.652	61592*	54	19.296	23.952	61683	14	16.085	4.480	
61397	10	16.463	17.023	61521*	35	12.558	11.480	61593	19	22.789	23.825	61684	25	16.191	4.550	
61398	24	18.207	17.186	61522	10	13.521	11.660	61594	22	2.546	24.526	61685	22	19.744	4.904	
61399	23	20.172	17.767	61523	18	21.636	11.726	61595	28	3.071	24.424	61686	38	24.072	4.325	
61400	10	22.508	17.122	61524	15	25.110	11.829	61596	13	5.463	24.061	61687	27	24.841	4.264	
61401	29	0.092	18.732	61525	21	5.782	12.714	61597	12	6.014	24.912	61688	18	25.144	4.094	
61402*	30	5.800	18.550	61526	25	8.277	12.460	61598	14	6.467	24.344	61689*	45	1.214	5.635	
61403	9	14.384	18.554	61527	13	10.326	12.639	61599	25	10.503	24.294	61690	10	4.369	5.830	
61404	16	17.252	18.054	61528	13	16.816	12.499	61600	16	11.426	24.863	61691	11	7.805	5.020	
61405	12	17.800	18.602	61529	14	17.642	12.080	61601	18	11.690	24.245	61692	22	11.608	5.800	
61406	18	23.114	18.479	61530	14	18.170	12.033	61602	18	17.832	24.149	61693	24	13.155	5.285	
61407	9	2.761	19.548	61531	13	21.176	12.736	61603	20	19.250	24.822	61694	12	18.806	5.177	
61408	21	3.773	19.653	61532	11	0.622	13.952	61604	11	21.201	24.870	61695	26	19.080	5.986	
61409	16	14.899	19.708	61533	13	8.030	13.466	61605	26	24.309	24.786	61696	20	20.049	5.758	
61410	9	15.505	19.376	61534*	63	11.225	13.960	61606	96	7.663	25.652	61697	22	23.684	5.398	
61411	17	16.084	19.574	61535	14	19.897	13.474	61607	17	12.792	25.324	61698	20	2.760	6.040	
61412	27	18.512	19.050	61536	30	23.425	13.678					61699	24	6.464	6.684	
61413*	34	21.280	19.730	61537	27	23.814	13.492					61700	29	9.575	6.280	
61414	8	21.612	19.396	61538	23	3.794	14.638					61701	29	10.432	6.741	
61415	23	0.884	20.728	61539	11	7.210	14.581					61702	20	13.910	6.198	
61416	14	6.213	20.369	61540	27	8.470	14.398					61703	27	21.515	6.778	
61417*	41	7.821	20.182	61541	20	9.070	14.422					61704	31	25.904	6.426	
61418	17	11.003	20.674	61542	12	11.672	14.535					61705	25	2.182	7.139	
61419	11	19.338	20.042	61543	14	15.299	14.485					61706*	44	3.118	7.896	
61420	12	6.206	21.192	61544	11	20.630	14.760					61707	16	6.128	7.950	
61421	20	8.348	21.437	61545	20	21.448	14.193					61708	13	24.967	7.212	
61422	17	8.443	21.049	61546	18	24.790	14.044					61709	15	0.509	8.058	
61423*	53	8.870	21.022	61547	31	1.704	15.901					61710	28	0.854	8.541	
61424	8	18.634	21.630	61548	14	6.802	15.262					61711	16	13.016	8.244	
61425	19	14.939	22.754	61549	19	7.123	15.540					61712	17	17.511	8.073	
61426	23	16.992	22.846	61550	12	8.530	15.550					61713	20	18.234	8.756	
61427*	46	18.564	22.768	61551*	57	16.910	15.410					61714	21	19.468	8.922	
61428	17	19.957	22.503	61552	14	18.232	15.457					61715	32	21.806	8.536	
61429*	52	20.388	22.852	61553	11	18.600	15.724					61716	25	22.798	8.246	
61430*	39	21.474	22.142	61554	12	18.984	15.116					61717	21	12.332	9.580	
61431	18	0.282	23.398	61555*	53	20.361	15.962					61718	32	14.894	9.244	
61432	21	1.387	23.793	61556*	60	0.177	16.488					61719	31	14.955	9.949	
61433	27	7.700	23.240	61557*	20	0.364	16.882					61720	19	17.518	9.746	
61434	8	14.486	23.808	61558	16	7.252	16.889					61721*	40	24.670	9.666	
61435	17	15.076	23.132	61559	19	10.080	16.014					61722	38	2.130	10.300	
61436	14	19.848	23.073	61560*	36	12.946	16.258					61723	16	8.701	10.945	
61437	12	3.633	24.803	61561	12	18.944	17.936					61724	24	9.768	10.398	
61438	22	8.565	24.378	61562*	34	20.456	17.854					61725	16	17.497	10.531	
61439	9	8.812	24.656	61563	14	20.776	17.856					61726	13	21.285	10.081	
61440	14	11.600	24.792	61564	24	1.063	18.380					61727	16	21.661	10.772	
61441	19	12.617	24.480	61565	19	4.215	18.575					61728	20	23.152	10.772	
61442	28	20.420	24.578	61566*	48	9.370	18.836					61729*	42	23.934	10.738	
61443	16	24.506	24.647	61567	31	15.635	18.934					61730	20	5.294	11.093	
61444	21	25.033	24.551	61568	12	18.282	18.934					61731*	39	9.132	11.472	
61445	12	8.890	25.108	61569	20	18.638	18.200					61732	22	13.752	11.634	
61446	18	9.927	25.520	61570	18	20.986	18.451					61733*	40	14.204	11.438	
				61571*	80	21.550	18.892					61734*				



61741	26	11.304	12.897	61813	20	7.840	21.872	61867	20	5.137	2.423	61939	16	24.300	15.138
61742	14	12.174	12.221	61814	25	9.531	21.414	61868	13	5.685	2.129	61940	47	25.678	15.506
61743	13	14.523	12.450	61815*	35	23.196	21.075	61869	25	5.924	2.616	61941	20	5.248	16.813
61744	40	20.246	12.800	61816	24	0.175	22.053	61870	13	17.296	2.251	61942	14	8.892	16.910
61745	45	25.742	12.635	61817	23	3.955	22.302	61871	18	20.716	2.118	61943	19	17.986	16.168
61746	34	1.632	13.960	61818*	57	5.896	22.529	61872	12	4.017	3.823	61944	23	18.508	16.994
61747	20	7.050	13.856	61819	22	12.236	22.348	61873	13	8.022	3.340	61945	12	20.413	16.135
61748	24	9.613	13.116	61820	23	21.348	22.482	61874	22	20.822	3.984	61946	18	20.850	16.206
61749	14	10.312	13.772	61821*	62	22.410	22.924	61875	38	1.916	4.302	61947*	64	21.916	16.019
61750	20	10.962	13.524	61822	23	9.084	23.235	61876	28	2.686	4.238	61948	16	24.033	16.079
61751	33	11.285	13.851	61823	10	11.588	23.812	61877	14	2.988	4.066	61949	27	2.548	17.576
61752	12	19.830	13.760	61824	17	11.599	23.798	61878	19	5.884	4.850	61950	33	7.660	17.916
61753	31	1.245	14.148	61825	22	13.992	23.625	61879	17	13.098	4.398	61951	17	10.305	17.662
61754	10	1.406	14.018	61826	16	20.465	23.664	61880	18	21.051	4.086	61952	12	13.672	17.112
61755	20	2.615	14.503	61827	40	25.733	23.948	61881	16	1.532	5.378	61953	20	16.408	17.760
61756	13	3.902	14.066	61828	14	0.694	24.300	61882	19	12.162	5.084	61954	22	17.806	17.890
61757	29	6.095	14.826	61829	25	6.664	24.982	61883	23	18.454	5.998	61955	21	20.515	17.086
61758	20	6.950	14.314	61830	29	6.725	24.743	61884	42	3.758	6.395	61956*	58	4.118	18.189
61759	12	8.738	14.492	61831	18	9.176	24.598	61885	25	5.888	6.919	61957	14	7.488	18.658
61760	10	15.862	14.874	61832	31	12.852	24.318	61886	17	6.890	6.044	61958	14	7.677	18.110
61761*	40	16.526	14.276	61833	18	19.208	24.104	61887	42	10.528	6.082	61959	14	8.594	18.680
61762	14	22.987	14.310	61834	32	2.221	25.251	61888	20	11.280	6.885	61960	24	25.812	18.914
61763	25	8.960	15.222	61835	27	10.202	25.716	61889	23	18.140	6.510	61961	15	4.900	19.056
61764	18	13.188	15.960	61836	13	12.021	25.613	61890	20	20.527	6.859	61962*	45	11.374	19.942
61765*	52	14.548	15.424	61837	60	12.035	25.340	61891	12	2.823	6.184	61963	20	13.939	19.150
61766	22	20.599	15.496	61838	29	12.700	25.334	61892	28	7.639	7.591	61964*	53	22.083	19.457
61767	20	20.975	15.472	61839	19	14.306	25.124	61893	15	11.409	7.224	61965	10	25.346	19.954
61768	14	23.064	15.309	61840	16	18.764	25.754	61894	10	17.340	7.214	61966	19	1.186	20.772
61769	24	5.687	16.465	61841	23	18.916	25.017	61895	27	0.652	8.226	61967	13	2.340	20.670
61770	27	7.792	16.123	61842	20	19.030	25.853	61896	18	4.210	8.988	61968	20	2.742	20.916
61771	28	8.315	16.014	61843	20	23.045	25.762	61897	11	15.220	8.852	61969	13	13.958	20.482
61772	12	22.459	16.144	61844	13	24.614	25.867	61898	26	21.197	8.258	61970	14	16.325	20.224
61773	10	4.920	17.798					61899*	45	2.531	9.640	61971	20	17.032	20.006
61774	19	11.926	17.992					61900	22	6.700	9.040	61972	33	17.512	20.979
61775	17	13.132	17.395					61901	26	10.308	9.959	61973	19	20.108	20.589
61776	20	18.390	17.238					61902	27	18.094	9.500	61974	30	21.744	20.358
61777	38	19.155	17.870					61903	15	1.016	10.753	61975*	32	24.501	20.740
61778	20	20.950	17.375					61904*	51	1.798	10.714	61976*	34	1.100	21.056
61779	25	24.656	17.600					61905	10	10.728	10.450	61977	13	3.888	21.794
61780	20	3.426	18.084					61906	16	14.612	10.192	61978	10	13.118	21.735
61781	27	3.566	18.572					61907	17	15.970	10.174	61979	21	18.155	21.454
61782	10	8.472	18.080					61908	28	18.032	10.222	61980*	51	19.994	21.318
61783	15	8.624	18.127					61909	14	18.269	10.728	61981*	68	0.316	22.906
61784	13	11.081	18.555					61910	29	21.218	10.011	61982	10	5.306	22.360
61785	18	11.316	18.850					61911	15	25.378	10.526	61983	27	6.614	22.625
61786	32	13.267	18.226					61912	25	5.884	11.750	61984*	60	7.204	22.504
61787*	43	14.481	18.539					61913	26	7.433	11.450	61985	18	15.592	22.882
61788	22	16.749	18.390					61914	37	12.181	11.405	61986*	52	3.650	23.919
61789	17	0.769	19.533					61915*	50	13.486	11.404	61987	20	4.734	23.464
61790	21	1.102	19.718					61916	24	15.360	11.268	61988*	52	5.478	23.316
61791	20	3.885	19.583					61917	14	16.931	11.538	61989	10	18.586	23.922
61792*	40	4.464	19.420					61918	18	20.106	11.376	61990*	51	7.220	24.422
61793	20	15.230	19.655					61919*	52	3.612	12.607	61991*	60	16.084	24.250
61794	12	17.404	19.403					61920	27	5.574	12.836	61992	14	16.106	24.698
61795	16	18.706	19.886					61921*	43	6.396	12.150	61993	17	0.973	25.744
61796	11	19.534	19.905					61922	12	3.436	13.000				
61797*	70	3.516	20.958					61923*	98	5.026	13.478				
61798	25	4.756	20.659					61924	20	5.184	13.257				
61799	20	7.660	20.597					61925	24	7.654	13.354				
61800	20	9.384	20.585					61926	11	10.238	13.580				
61801	13	9.610	20.844					61927*	39	16.931	13.864				
61802	12	12.586	20.034					61928	11	0.867	14.290				
61803	24	12.634	20.960					61929	51	5.922	14.640				
61804	12	12.933	20.144					61930	22	7.064	14.342				
61805	10	14.102	20.602					61931*	27	14.342	14.812				
61806	18	16.734	20.259					61932	23	17.560	14.844				
61807	40	19.716	20.045					61933*	49	23.851	14.588				
61808	21	23.282	20.792					61934	15	6.550	15.306				
61809	22	24.436	20.695					61935	25	11.922	15.930				
61810	24	24.834	20.943					61936	12	14.972	15.349				
61811	10	2.083	21.092					61937	20	22.081	15.192				
61812	20	5.854	21.768					61938	11	22.238	15.036				

R.A. 23<sup>h</sup> 8<sup>m</sup>

Plate 1147; 1917 Dec. 1.

Provisional Constants.

A	B	C
-0.2542	+0.00508	-1.194

D	E	F
-0.00463	-0.02536	+0.0783

Mag. = 16.7 - 1.09√d

R.A. 23<sup>h</sup> 0<sup>m</sup>

Plate 1129; 1917 Nov. 7.

Provisional Constants.

A	B	C
-0.2550	-0.0195	-1.840

D	E	F
+0.00220	-0.02562	-1.541

Mag. = 17.1 - 1.09√d

No.	d	x	y
61851	26	6.602	0.013
61852	11	8.592	0.654
61853	18	8.629	0.444
61854	18	14.520	0.000
61855	13	15.083	0.459
61856	10	17.718	0.071
61857*	56	22.525	0.586
61858	40	25.878	0.805
61859	8	0.882	1.738
61860	16	5.177	1.018
61861	26	6.870	1.414
61862	11	11.445	1.416
61863	16	21.960	1.358
61864	40	25.220	1.894
61865	16	1.635	2.191
61866	15	4.276	2.896



62056	19	15.994	12.154	62128	18	20.036	23.474	62188	10	18.640	6.318	62260	22	6.628	17.289	62354	27	10.926	0.344
62057	22	23.180	12.114	62129	16	20.098	23.744	62189	20	21.341	6.716	62261	17	12.213	17.318	62355	38	17.578	0.632
62058*	36	9.015	13.242	62130	25	20.166	23.844	62190	11	7.609	7.099	62262	23	12.644	17.660	62356	26	19.718	0.370
62059	28	12.310	13.412	62131	36	24.064	23.674	62191	16	12.334	7.120	62263	27	12.924	17.824	62357	17	21.056	0.456
62060	16	13.239	13.372	62132*	52	4.500	24.512	62192	16	4.595	8.680	62264	13	21.723	17.782	62358	12	2.692	1.048
62061	18	13.865	13.975	62133	18	12.118	24.804	62193*	67	7.484	8.349	62265	24	24.982	17.784	62359	15	11.460	1.428
62062	14	14.520	13.065	62134	26	19.504	24.444	62194	24	12.336	8.200	62266	14	1.400	18.676	62360	20	16.082	1.628
62063	16	16.896	13.054	62135	20	5.094	25.065	62195	10	19.742	8.354	62267	25	11.056	18.222	62361	26	17.028	1.219
62064	17	18.604	13.034	62136	38	10.806	25.558	62196	27	22.876	8.940	62268	22	11.336	18.814	62362	35	19.652	1.061
62065	15	25.322	13.642	62137	20	11.146	25.362	62197*	47	23.606	8.614	62269	29	16.501	18.260	62363	30	21.046	1.838
62066*	46	1.910	14.751	62138	19	24.915	25.081	62198	10	24.952	8.633	62270	10	10.225	19.409	62364	22	25.244	1.140
62067*	42	6.434	14.964					62199	10	0.942	9.226	62271*	52	11.750	19.028	62365	25	25.614	1.131
62068	14	10.444	14.416					62200*	48	1.216	9.421	62272	14	18.930	19.940	62366*	35	7.278	2.839
62069	15	11.811	14.734					62201	17	6.098	9.632	62273	12	20.596	19.747	62367	10	7.322	2.818
62070	23	19.796	14.792					62202	34	6.508	9.928	62274	20	0.963	20.075	62368	22	10.976	2.936
62071	13	20.396	14.144					62203	14	7.794	9.227	62275	20	2.240	20.450	62369	25	11.494	2.418
62072	20	21.924	14.444					62204	12	13.165	9.896	62276	9	6.882	20.203	62370	47	21.918	2.976
62073	27	22.740	14.464					62205	11	15.782	9.864	62277	20	16.316	20.794	62371	25	22.937	2.492
62074	13	24.618	14.298					62206	10	16.562	9.690	62278*	45	19.512	20.454	62372	28	0.350	3.278
62075	25	0.153	15.390					62207	10	2.494	10.825	62279	23	20.208	20.423	62373*	43	0.954	3.303
62076	26	2.371	15.296					62208	19	9.002	10.771	62280	27	25.804	20.478	62374	21	4.317	3.458
62077*	39	3.753	15.636					62209	12	9.928	10.393	62281	17	2.047	21.860	62375	15	6.058	3.540
62078*	37	6.346	15.926					62210	17	21.867	10.337	62282	25	9.062	21.846	62376	28	15.078	3.918
62079	16	8.302	15.332					62211	11	0.387	11.460	62283	22	11.086	21.174	62377	12	23.727	3.810
62080	26	8.763	15.346					62212	15	4.754	11.452	62284*	33	11.362	21.919	62378*	42	23.728	3.154
62081	17	25.214	15.428					62213	22	5.412	11.650	62285	14	20.197	21.116	62379	9	3.772	4.914
62082	17	25.692	15.498					62214	21	6.804	11.958	62286	17	23.168	21.332	62380	14	6.832	4.823
62083	56	0.995	16.218					62215	11	8.382	11.649	62287	22	2.274	22.691	62381	12	11.446	4.748
62084	15	1.852	16.427					62216	30	8.636	11.574	62288	22	6.086	22.712	62382	32	19.840	4.585
62085	26	2.125	16.241					62217	22	1.076	12.237	62289	28	6.129	22.046	62383	12	5.528	5.576
62086	15	3.717	16.054					62218	22	4.505	12.405	62290*	36	21.817	22.978	62384	9	7.857	5.374
62087	23	6.476	16.431					62219	10	4.984	12.695	62291	34	2.046	23.788	62385	12	12.936	5.054
62088	36	10.872	16.326					62220*	39	5.116	12.047	62292	9	2.335	23.234	62386	10	17.975	5.552
62089	12	11.562	16.348					62221	38	7.694	12.769	62293	19	11.408	23.170	62387	17	19.472	5.642
62090	17	21.474	16.626					62222	31	11.619	12.080	62294	14	15.607	23.038	62388	32	19.675	5.440
62091	14	21.617	16.637					62223	25	20.022	12.226	62295	28	17.010	23.411	62389	9	20.564	5.580
62092*	32	23.526	16.391					62224	9	20.312	12.752	62296	13	20.240	23.574	62390	37	21.934	5.166
62093*	39	24.874	16.166					62225	26	22.520	12.366	62297	18	21.101	23.463	62391	51	22.256	5.305
62094	13	0.853	17.720					62226	11	3.227	13.743	62298	28	6.344	24.881	62392	10	24.886	5.309
62095	31	10.908	17.144					62227*	50	7.660	13.955	62299	9	7.373	24.971	62393	30	6.888	6.762
62096	16	13.362	17.380					62228	41	11.739	13.810	62300	20	10.340	24.040	62394	15	7.494	6.538
62097*	52	16.085	17.594					62229*	56	11.754	13.816	62301	22	14.970	24.259	62395	11	16.750	6.936
62098	16	18.666	17.120					62230	22	13.149	13.408	62302	20	17.780	24.080	62396*	41	17.303	6.904
62099	16	18.723	17.191					62231	21	21.724	13.098	62303	12	19.006	24.795	62397	37	23.312	6.470
62100*	56	22.868	17.582					62232	26	0.650	14.591	62304	21	2.919	25.190	62398	31	8.196	7.298
62101*	40	5.965	18.189					62233	10	2.527	14.414	62305	12	7.428	25.047	62399	22	9.748	7.254
62102	36	8.636	18.546					62234	9	3.170	14.222	62306	34	9.925	25.786	62400	18	13.992	7.562
62103	17	9.504	18.185					62235	19	14.918	14.701	62307	25	22.493	25.182	62401	26	15.961	7.994
62104	30	15.630	18.586					62236	13	21.703	14.506					62402	31	25.290	7.770
62105	28	18.960	18.946					62237	11	21.884	14.334					62403*	50	1.337	8.782
62106	23	23.455	18.555					62238	8	25.806	14.697					62404	13	2.686	8.778
62107	47	0.228	19.654					62239	13	3.133	15.539					62405	27	6.292	8.752
62108	18	1.942	19.434					62240	21	3.614	15.599					62406	19	6.877	8.338
62109	36	3.956	19.046					62241	23	6.292	15.980					62407	11	6.933	8.536
62110	28	6.013	19.304					62242*	36	6.862	15.603					62408	24	11.732	8.259
62111	26	13.516	19.395					62243	21	7.146	15.752					62409	32	12.140	8.656
62112*	39	2.674	20.895					62244	14	8.633	15.630					62410	12	21.598	8.194
62113	24	8.945	20.387					62245	20	10.032	15.534					62411*	45	22.644	8.114
62114	20	12.871	20.626					62246	24	11.876	15.373					62412	30	23.486	8.288
62115	20	24.284	20.335					62247*	73	20.563	15.543					62413	28	0.614	9.122
62116	36	14.334	21.583					62248	10	22.346	15.200					62414	33	3.756	9.022
62117	38	14.907	21.994					62249	18	25.485	15.742					62415	23	9.544	9.806
62118	19	16.730	21.690					62250*	32	1.453	16.510					62416	32	15.629	9.047
62119	19	17.620	21.655					62251	14	2.640	16.111					62417	10	17.832	9.788
62120	26	5.116	22.500					62252*	35	2.796	16.277					62418	32	18.125	9.634
62121	18	5.726	22.200					62253	30	4.461	16.386					62419	21	19.924	9.253
62122	19	8.896	22.272					62254	13	4.930	16.582					62420	21	23.096	9.988
62123	44	11.812	22.144					62255	19	16.802	16.293					62421	20	10.258	10.711
62124	14	15.642	22.375					62256	32	23.142	16.878					62422	24	21.623	10.492
62125	30	24.298	22.576					62257	27	23.146	16.638					62423	12	19.743	11.214
62126	20	16.836	23.392					62258*	56	0.798	17.708					62424	37	24.594	11.957
62127	41	17.382	23.036					62259*	50										



62426	16	2.833	12.970	62498*	40	11.490	23.756	62583*	48	4.270	5.602	62655	28	7.358	17.464	62707	30	3.452	1.584
62427	12	8.806	12.312	62499	12	13.974	23.856	62584	44	10.706	5.573	62656	11	8.087	17.028	62708	15	14.726	1.732
62428	16	9.079	12.476	62500	12	16.870	23.357	62585	24	12.854	5.674	62657	21	8.300	17.976	62709	21	15.749	1.648
62429	31	10.652	12.071	62501	17	8.912	24.124	62586	28	18.816	5.192	62658	14	8.445	17.644	62710	35	10.875	2.702
62430	12	21.872	12.288	62502	26	14.554	24.526	62587	10	22.585	5.551	62659	18	9.500	17.848	62711	10	11.984	2.455
62431	10	22.410	12.950	62503	19	16.337	24.578	62588	11	23.232	5.905	62660	13	11.458	17.063	62712	12	14.756	2.106
62432	22	23.862	12.288	62504	14	17.548	24.168	62589	10	6.055	6.980	62661	13	12.628	17.108	62713	14	19.600	2.989
62433*	40	14.061	13.584	62505*	45	17.616	24.968	62590	18	14.784	6.731	62662	21	20.245	17.817	62714	10	23.874	2.251
62434	23	21.648	13.468	62506	11	17.683	24.714	62591	24	15.693	6.904	62663	27	24.856	17.494	62715	25	24.068	2.547
62435	13	24.418	13.200	62507	31	20.168	24.938	62592	24	17.604	6.737	62664	45	25.098	17.988	62716	10	5.625	3.228
62436	16	5.538	14.836	62508	23	0.536	25.368	62593	16	18.228	6.937	62665	34	1.430	18.725	62717	10	9.300	3.299
62437	8	5.560	14.065	62509	9	4.300	25.860	62594*	66	0.690	7.502	62666*	53	9.257	18.025	62718	10	10.079	3.426
62438	25	5.991	14.332	62510	28	5.838	25.657	62595	24	1.542	7.675	62667	10	22.072	18.198	62719	14	13.637	3.518
62439	20	10.007	14.259	62511	37	10.846	25.186	62596	26	3.360	7.146	62668*	70	22.363	18.508	62720	12	14.802	3.504
62440	32	14.530	14.548	62512	38	12.635	25.668	62597	18	8.590	7.840	62669	28	12.430	19.406	62721	14	2.919	4.060
62441	13	15.362	14.978	62513	9	25.669	25.929	62598	10	21.520	7.610	62670*	46	19.270	19.528	62722	56	3.200	4.780
62442	32	21.127	14.242					62599*	90	25.141	7.163	62671	31	24.048	19.970	62723	31	14.030	4.326
62443	8	0.198	15.394					62600	30	20.674	8.730	62672*	56	2.604	20.392	62724	35	14.708	4.962
62444	18	3.354	15.876					62601	14	22.178	8.662	62673	22	13.430	20.343	62725	31	25.344	4.756
62445	21	4.548	15.581					62602	33	25.961	8.344	62674	18	15.320	20.526	62726	26	25.841	4.505
62446	26	4.566	15.932					62603	19	1.157	9.394	62675	14	15.568	20.786	62727*	107	3.160	5.172
62447	23	9.738	15.476					62604	20	11.026	9.854	62676	53	21.394	20.872	62728*	38	11.291	5.967
62448	16	9.994	15.764					62605	16	22.445	9.430	62677	18	23.258	20.926	62729	37	21.600	5.990
62449	39	14.776	15.647					62606	14	0.404	10.430	62678	16	23.971	20.100	62730	18	0.128	6.050
62450*	45	16.454	15.690					62607	14	11.407	10.712	62679	11	4.596	21.984	62731	16	0.768	6.399
62451	28	22.250	15.552					62608	22	12.056	10.746	62680	11	14.052	21.691	62732	34	11.017	6.360
62452	29	1.032	16.813					62609	14	14.796	10.685	62681	28	15.288	21.273	62733	26	14.199	6.811
62453*	31	12.153	16.698					62610	13	15.062	10.480	62682	24	21.886	21.629	62734	31	14.674	6.970
62454	27	13.412	16.262					62611	10	15.084	10.660	62683	10	7.232	22.188	62735*	46	19.219	6.592
62455	19	17.648	16.081					62612	11	18.450	10.825	62684	17	9.581	22.778	62736	20	20.030	6.085
62456	21	22.749	16.748					62613	28	18.452	10.896	62685	28	12.764	22.352	62737	15	20.496	6.446
62457	10	23.253	16.213					62614	25	24.833	10.680	62686	10	12.835	22.644	62738*	83	2.672	7.623
62458	32	1.030	17.056					62615	14	1.940	11.707	62687	16	15.606	22.266	62739	34	10.414	7.738
62459	24	2.888	17.930					62616	43	2.676	11.368	62688	29	16.359	22.230	62740	23	15.629	7.406
62460*	36	6.903	17.376					62617*	38	4.598	11.488	62689	35	8.965	23.785	62741	15	16.639	7.073
62461	10	13.613	17.408					62618	26	18.080	11.383	62690	36	20.736	23.966	62742	30	17.056	7.564
62462	17	18.480	17.118					62619	20	20.207	11.600	62691	19	15.458	24.724	62743	10	18.771	7.960
62463	20	25.975	17.386					62620	27	24.557	11.806	62692	18	15.720	24.591	62744	10	19.735	7.945
62464	32	6.270	18.216					62621	27	25.270	11.517	62693	10	16.642	24.476	62745	34	3.506	8.778
62465	26	10.694	18.120					62622	12	0.479	12.384	62694	28	17.916	24.888	62746	29	3.703	8.640
62466	9	10.713	18.096					62623	14	2.508	12.629	62695	47	14.596	25.934	62747	16	8.106	8.067
62467	30	10.950	18.212					62624	20	4.702	12.316	62696	21	14.773	25.178	62748	15	21.717	8.418
62468	18	12.780	18.852					62625	14	7.712	12.560	62697	35	15.555	25.198	62749	33	22.419	8.098
62469	37	18.608	18.868					62626	14	8.668	12.824	62698	26	22.753	25.155	62750	18	0.031	9.615
62470	30	20.900	18.740					62627	33	12.082	12.807					62751	23	5.864	9.168
62471	10	8.242	19.653					62628	17	17.324	12.290					62752	20	14.794	9.965
62472	37	8.819	19.948					62629	28	18.554	12.947					62753	26	16.391	9.290
62473	14	10.491	19.762					62630	13	18.576	12.948					62754	18	18.238	9.408
62474	14	10.539	19.936					62631	12	20.922	12.211					62755	10	19.412	9.025
62475	10	19.651	19.089					62632*	60	7.255	13.692					62756	13	20.178	9.385
62476	26	20.375	19.118					62633	21	21.187	13.372					62757	15	20.694	9.826
62477*	43	21.339	19.806					62634	19	24.288	13.250					62758	34	21.320	9.616
62478	9	21.488	19.469					62635*	44	24.610	13.240					62759	18	23.436	9.363
62479	37	23.320	19.248					62636	11	25.110	13.284					62760	33	23.814	9.666
62480	12	3.530	20.552					62637	12	4.479	14.923					62761	10	25.700	9.329
62481	29	3.762	20.608					62638	16	6.046	14.124					62762	10	1.960	10.339
62482	21	8.698	20.598					62639	10	20.121	14.300					62763	32	9.838	10.742
62483	23	10.126	20.256					62640	10	25.170	14.554					61764*	150	9.972	10.522
62484	10	19.322	20.204					62641	28	0.330	15.007					61765	34	11.266	10.874
62485*	42	24.476	20.912					62642	32	7.139	15.870					61766	34	13.209	10.406
62486	20	1.138	21.508					62643	13	13.019	15.636					61767	13	21.992	10.190
62487	20	6.566	21.952					62644	18	15.180	15.906					61768	33	2.416	11.108
62488	27	6.666	21.631					62645	30	19.948	15.122					62769	33	2.861	11.938
62489	16	20.105	21.396					62646	31	22.592	15.900					62770	11	3.614	11.040
62490	22	4.604	22.988					62647	19	25.678	15.028					62771	31	9.758	11.796
62491	30	5.912	22.080					62648	13	0.842	16.210					62772	12	10.418	11.824
62492	12	6.193	22.612					62649	20	4.100	16.835					62773	38	16.681	11.146
62493	13	7.380	22.246					62650	22	12.887	16.338					62774	33	2.158	12.234
62494	25	20.118	22.942					62651	14	14.024	16.946					62775	11	4.900	12.962
62495	9	0.888	23.614					62652	11	16.355	16.653					62776	25	9.616	12.472
62496*	47	4.135	23.706					62653	10	18.877	16.718					62777	31	14.000	12.402
62497	39	8.9																	



62779	25	22.986	12.956	62851	27	9.076	23.944	62917	32	3.615	4.444	62989	19	25.199	12.638	63061	28	2.964	23.420
62780	12	23.748	12.277	62852	22	9.591	23.280	62918	18	4.898	4.280	62990	18	0.852	13.004	63062	34	5.128	23.514
62781	23	24.534	12.176	62853	15	13.343	23.394	62919	20	6.816	4.346	62991	33	6.858	13.878	63063	10	7.037	23.046
62782	34	25.815	12.046	62854	24	16.186	23.354	62920	12	9.935	4.452	62992	39	10.736	13.788	63064	16	7.554	23.428
62783	25	1.905	13.666	62855	35	16.777	23.664	62921	17	10.770	4.772	62993	24	10.780	13.103	63065	22	10.195	23.598
62784*	38	2.225	13.656	62856	34	16.903	23.404	62922	15	12.522	4.544	62994*	100	11.416	13.804	63066	18	10.716	23.126
62785	12	2.726	13.690	62857	31	17.312	23.178	62923	32	17.936	4.764	62995	19	11.486	13.980	63067	12	14.290	23.033
62786	20	6.200	13.292	62858	29	17.625	23.172	62924	27	17.970	4.535	62996	27	20.844	13.188	63068	10	23.840	23.627
62787	31	15.435	13.788	62859	32	18.085	23.112	62925	34	20.126	4.716	62997	25	21.968	13.547	63069	34	24.218	23.407
62788	12	19.255	13.635	62860*	44	18.108	23.114	62926	32	20.194	4.677	62998	18	22.720	13.424	63070	30	3.109	24.156
62789	33	19.744	13.113	62861	31	18.165	23.509	62927	34	20.324	4.314	62999	20	24.456	13.580	63071	14	10.055	24.582
62790	14	22.022	13.694	62862	19	21.124	23.378	62928*	40	8.276	5.612	63000	27	0.314	14.792	63072	12	0.076	25.040
62791	30	4.314	14.950	62863	18	24.939	23.318	62929	20	12.276	5.896	63001	32	0.880	14.603	63073	21	0.364	25.613
62792	13	5.274	14.602	62864	16	8.265	24.448	62930	16	14.677	5.050	63002	30	2.398	14.504	63074	25	1.382	25.902
62793	17	6.632	14.800	62865	13	10.019	24.686	62931*	60	19.124	5.116	63003*	46	9.341	14.996	63075	12	3.436	25.100
62794	27	10.454	14.965	62866	12	11.872	24.516	62932	12	23.254	5.925	63004	30	13.103	14.036	63076	33	3.626	25.241
62795	26	11.469	14.576	62867	18	12.185	24.814	62933	31	4.266	6.604	63005	12	14.896	14.620	63077	28	3.835	25.366
62796	10	14.630	14.477	62868	34	16.679	24.548	62934	34	9.094	6.890	63006	14	16.885	14.874	63078	23	4.031	25.034
62797	23	18.835	14.906	62869	38	20.428	24.859	62935	34	18.300	6.889	63007	35	17.462	14.098	63079	17	5.916	25.307
62798	15	19.376	14.940	62870	23	25.074	24.050	62936*	36	19.534	6.034	63008	16	20.975	14.203	63080	22	6.626	25.026
62799	12	21.818	14.221	62871	15	25.974	24.934	62937	31	24.824	6.228	63009	17	25.511	14.454	63081	29	20.915	25.585
62800	20	22.427	14.727	62872	34	0.535	25.494	62938	16	3.677	7.642	63010	17	3.846	15.545	63082	17	23.775	25.395
62801	30	22.996	14.544	62873	11	3.282	25.112	62939	12	4.275	7.304	63011	12	7.050	15.890				
62802	31	24.502	14.468	62874	30	7.221	25.280	62940	35	6.448	7.814	63012*	39	17.746	15.900				
62803	30	3.306	15.409	62875	31	8.865	25.411	62941*	56	10.435	7.486	63013	33	18.856	15.056				
62804	34	10.664	15.154	62876	32	13.406	25.336	62942	25	18.515	7.016	63014	29	8.238	16.768				
62805	33	12.590	15.810	62877	18	16.840	25.906	62943*	49	21.110	7.224	63015	34	15.486	16.762				
62806*	140	14.998	15.213	62878	36	17.382	25.176	62944	21	25.954	7.386	63016	18	17.448	16.878				
62807	10	19.301	15.800	62879	15	22.334	25.460	62945	34	0.212	8.113	63017	20	23.113	16.370				
62808	13	25.924	15.516	62880	23	23.337	25.756	62946	34	5.290	8.803	63018	25	24.298	16.758				
62809	34	0.254	16.316	62881	31	25.573	25.132	62947	36	10.356	8.807	63019	11	7.361	17.861				
62810*	38	11.040	16.459	62882	22	25.776	25.260	62948	17	16.050	8.360	63020*	140	7.786	17.926				
62811*	42	16.791	16.098					62949	16	21.034	8.414	63021	33	15.529	17.532				
62812	34	2.522	17.872					62950	19	22.216	8.353	63022	16	22.574	17.037				
62813	33	6.544	17.240					62951	19	1.256	9.374	63023	30	2.573	18.064				
62814	33	7.022	17.534					62952	35	1.638	9.675	63024	28	11.000	18.271				
62815	31	9.848	17.904					62953	29	7.125	9.714	63025	10	23.800	18.289				
62816	19	16.550	17.376					62954*	47	10.575	9.664	63026	35	5.040	19.151				
62817*	60	21.936	17.612					62955	19	12.592	9.284	63027	29	6.987	19.886				
62818	26	24.625	17.999					62956	20	12.812	9.912	63028	34	7.236	19.554				
62819	60	0.055	18.906					62957*	37	14.422	9.672	63029*	47	7.246	19.586				
62820	36	2.766	18.359					62958	20	16.396	9.964	63030	21	10.138	19.256				
62821	29	16.029	18.120					62959	26	25.106	9.406	63031	28	12.434	19.822				
62822	34	16.541	18.352					62960	35	5.432	10.274	63032	14	22.396	19.262				
62823	15	18.576	18.654					62961*	62	6.118	10.656	63033	35	23.568	19.940				
62824	12	3.037	19.963					62962	11	6.726	10.838	63034	36	0.824	20.645				
62825	28	5.956	19.226					62963	30	13.508	10.763	63035	13	4.194	20.835				
62826	24	8.008	19.751					62964*	38	13.700	10.280	63036	22	12.958	20.784				
62827	13	10.827	19.902					62965	38	14.516	10.584	63037	18	15.972	20.473				
62828*	38	21.168	19.804					62966	35	15.712	10.432	63038*	43	17.714	20.486				
62829	29	1.675	20.464					62967	14	1.259	11.366	63039	20	24.373	20.014				
62830	35	1.750	20.338					62968	25	5.036	11.864	63040	26	2.340	21.534				
62831	18	3.746	20.204					62969	16	7.380	11.543	63041	12	7.128	21.294				
62832	32	10.322	20.259					62970	32	8.215	11.602	63042	32	10.844	21.874				
62833*	49	18.103	20.948					62971	10	9.046	11.726	63043	14	14.776	21.368				
62834	13	20.722	20.764					62972	31	11.516	11.854	63044	32	18.622	21.249				
62835	34	22.856	20.536					62973	33	12.940	11.967	63045	12	19.983	21.255				
62836	23	0.980	21.295					62974	44	13.978	11.522	63046	13	21.976	21.453				
62837	24	3.190	21.012					62975*	66	14.490	11.466	63047	33	0.796	22.151				
62838	19	7.236	21.074					62976	25	17.669	11.692	63048	32	4.054	22.856				
62839	32	10.065	21.420					62977	12	20.249	11.920	63049	12	4.617	22.697				
62840	12	16.057	21.524					62978*	41	24.366	11.803	63050	29	13.200	22.132				
62841	10	23.750	21.530					62979	12	1.608	12.306	63051	22	13.772	22.298				
62842	22	24.347	21.439					62980	19	2.397	12.196	63052	33	15.870	22.718				
62843	33	4.067	22.217					62981*	35	3.690	12.047	63053	38	16.585	22.009				
62844	34	5.154	22.678					62982	20	4.702	12.185	63054	32	16.623	22.320				
62845	23	11.688	22.203					62983	28	6.398	12.490	63055	40	17.880	22.336				
62846	20	12.020	22.320					62984	10	6.445	12.354	63056	31	21.082	22.952				
62847	32	22.808	22.030					62985	20	13.836	12.712	63057	19	21.915	22.677				
62848*	47	3.792	23.656					62986	34	16.104	12.436	63058	18	23.712	22.392				
62849	30	8.074	23.604					62987	33	20.536	12.915	63059	27	24.373	22.614				
62850	10	8.090	23.366					62988	36	24.978	12.407	63060	12	24.424	2				



63127	10	25.402	4.746	63157*	49	23.278	9.354	63187	13	12.510	13.246	63217	38	23.310	17.390	63247	23	9.046	22.230
63128	17	6.670	5.716	63158	11	24.900	9.371	63188	21	13.364	13.622	63218	39	4.146	18.616	63248	12	12.200	22.872
63129	10	19.322	5.692	63159	41	25.468	9.320	63189	31	13.770	13.441	63219	41	5.519	18.452	63249	9	23.573	22.872
63130	12	22.550	5.924	63160	20	5.234	10.792	63190	11	18.640	13.209	63220	13	22.792	18.038	63250	35	1.917	23.402
63131	10	23.818	5.521	63161	10	11.388	10.512	63191	13	19.050	13.546	63221	13	24.071	18.442	63251	17	5.727	23.544
63132	28	2.440	6.360	63162	25	21.837	10.164	63192	10	21.672	13.128	63222	33	1.252	19.967	63252	10	7.260	23.992
63133	19	5.670	6.265	63163	17	23.794	10.834	63193	27	22.252	13.417	63223	10	5.994	19.299	63253	13	9.532	23.790
63134	17	8.504	6.330	63164	32	25.440	10.975	63194	17	3.160	14.516	63224	38	10.078	19.905	63254*	45	9.998	23.802
63135	23	13.392	6.428	63165*	42	2.004	11.891	63195	21	10.460	14.421	63225	17	10.078	19.669	63255	34	12.579	23.036
63136	18	0.638	7.556	63166	18	12.114	11.078	63196	14	17.606	14.106	63226	10	10.568	19.916	63256	27	12.795	23.664
63137	19	3.566	7.500	63167	12	23.900	11.178	63197	30	22.386	14.228	63227*	40	12.937	19.047	63257	24	15.968	23.346
63138	34	4.131	7.850	63168	22	25.503	11.747	63198	12	23.363	14.358	63228	26	15.870	19.423	63258	32	16.622	23.832
63139	13	6.878	7.903	63169	18	25.882	11.646	63199	41	24.670	14.218	63229	11	20.123	19.143	63259	40	16.978	23.639
63140*	44	9.815	7.398	63170	39	2.617	12.486	63200	12	24.774	14.801	63230	10	21.816	19.444	63260	39	17.172	23.940
63141	32	16.470	7.518	63171	20	2.839	12.717	63201	12	6.711	15.164	63231	14	2.051	20.040	63261*	47	22.996	23.808
63142	17	19.967	7.090	63172	16	3.897	12.274	63202	17	12.544	15.596	63232	15	10.252	20.205	63262*	47	9.526	24.789
63143	17	23.276	7.134	63173	12	4.554	12.861	63203	27	25.300	15.952	63233	41	13.882	20.616	63263	14	10.501	24.614
63144	24	23.860	7.049	63174	35	5.248	12.160	63204	13	0.784	16.426	63234	13	22.180	20.618	63264	29	16.051	24.666
63145	16	25.884	7.174	63175	41	8.666	12.389	63205	25	1.964	16.807	63235	34	8.625	21.434	63265*	38	16.852	24.152
63146	24	6.441	8.343	63176	19	9.012	12.804	63206	14	4.082	16.402	63236	26	10.466	21.306	63266*	45	22.230	24.104
63147	11	8.914	8.392	63177	12	16.134	12.141	63207	25	7.595	16.300	63237	22	13.382	21.428	63267	10	1.485	25.376
63148	10	13.500	8.114	63178	39	23.660	12.772	63208	44	9.061	16.097	63238	19	14.234	21.301	63268	10	7.204	25.059
63149	31	23.628	8.410	63179	12	0.385	13.504	63209	11	9.643	16.937	63239	11	14.342	21.406	63269*	44	8.326	25.152
63150	23	2.731	9.511	63180	17	2.112	13.652	63210	13	12.952	16.848	63240	40	14.456	21.224	63270	31	13.993	25.116
63151	30	4.879	9.168	63181*	52	7.255	13.564	63211	30	18.138	16.890	63241	25	16.322	21.161	63271	31	14.773	25.750
63152	40	10.318	9.276	63182	30	7.580	13.702	63212	34	24.627	16.969	63242	25	22.861	21.584	63272	40	19.330	25.632
63153	27	15.733	9.740	63183*	48	9.066	13.184	63213	38	12.008	17.282	63243	32	24.666	21.127				
63154	12	15.764	9.926	63184	31	10.468	13.681	63214	20	12.439	17.796	63244	18	1.407	22.398				
63155	14	17.157	9.241	63185	12	10.939	13.227	63215	19	13.116	17.742	63245	30	2.066	22.616				
63156	34	19.198	9.375	63186	37	11.180	13.772	63216	35	22.091	17.151	63246	13	4.152	22.216				



NIZAMIAH OBSERVATORY, HYDERABAD

# ASTROGRAPHIC CATALOGUE, 1900:0

ZONE  $-19^{\circ}$

## STANDARD CO-ORDINATES

OF

THE STARS IN THE ALGIERS ASTRONOMISCHE  
GESELLSCHAFT CATALOGUE



## EXPLANATION OF THE COLUMNS.

*Hyderabad Number.*—This is the number assigned in the preceding Catalogue of measures of plates taken at Hyderabad. Some stars occur on two plates, and in this case they have two numbers—thus, Algiers 40 is Hyderabad  $-19^{\circ}$ , 91, and also Hyderabad  $-19^{\circ}$ , 337. Some stars will also occur on plates with centres in Declination  $-18^{\circ}$  or  $-20^{\circ}$ . Occasionally, owing to slight errors of centering the plate, a star will fall outside the réseau, and hence will have no number on such a plate, but will occur on an adjacent plate with a Hyderabad number.

*Algiers Number and Magnitude.*—These are taken direct from the Algiers Astronomische Gesellschaft Catalogue and require no explanation.

*Standard Co-ordinates.*—This name was first proposed in *M.N.R.A.S.*, liv. p. 11, and has been generally adopted for the rectangular co-ordinates of a star on a plate fulfilling the following ideal conditions:—

- (i.) Plate truly centred and oriented for 1900.0.
- (ii.) No refraction and aberration.
- (iii.) A suitable unit of length adopted.

The formulæ giving these co-ordinates are—

$$\begin{aligned}\xi &= k \cdot \tan(\alpha - A) \cdot \sec(\theta - D) \cdot \cos \theta, \\ \eta &= k \cdot \tan(\theta - D),\end{aligned}$$

where

$$\tan \theta = \sec(\alpha - A) \cdot \tan \delta,$$

where

$\alpha, \delta$  are the R.A. and Declination of the star,  
 $A, D$  are the R.A. and Declination of the plate centre,

and  $k$  depends on the adopted unit of length. For the Astrographic Catalogue the unit chosen is 5' at the plate centre, and  $k=687.54935$ .

For the calculation of  $\xi, \eta$ , approximate formulæ were used, and reduced to tables. To avoid negative signs the constant 13.0000 has been added to all the values of  $\xi, \eta$  to form

$$\xi' = \xi + 13, \eta' = \eta + 13,$$

and the quantities  $\xi', \eta'$  are given in the following Catalogue. The co-ordinates are thus referred to a corner of the réseau and not to the plate centre.

The Right Ascensions and Declinations used are those given in the Catalogue for 1900.0 without any application of proper motions.

For determining plate constants, stars known or suspected of proper motion, and a few stars, the Catalogue place of which appeared to be in error were omitted from the solution.



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
<b>R.A. 0<sup>h</sup> 4<sup>m</sup></b>					<b>R.A. 0<sup>h</sup> 28<sup>m</sup></b>					<b>R.A. 0<sup>h</sup> 52<sup>m</sup></b>				
184	9996	8.7	1.0622	24.6677	681	109	9.2	2.0827	5.5615	1353	223	9.1	0.7789	19.6634
67	9997	8.6	1.1671	9.8303	784	112	8.8	4.2391	20.1624	1318	225	8.4	1.1279	14.4599
69	1	9.1	3.4129	9.7733	792	114	8.6	5.1204	21.8857	1271	226	7.9	2.0736	3.3717
54	3	6.8	5.3328	8.1563	745	116	7.8	6.1571	15.0951	1278	227	8.9	3.3964	5.7530
15	5	9.1	5.9853	3.2281	788	118	8.9	8.0438	21.4795	1290	229	8.6	4.5392	7.5616
130	6	8.8	6.3893	17.3142	719	119	7.0	10.2926	10.2849	1291	230	8.5	4.9757	7.8820
132	10	8.7	7.1392	17.5435	707	120	8.5	11.7366	8.9411	1252	233	8.4	7.6770	0.8287
4	11	6.9	7.8560	0.3376	756	121	9.0	12.0946	15.9119	1319	235	8.0	9.7975	13.8866
122	12	8.0	9.8361	15.8978	668	123	8.8	12.6832	3.9982	1334	237	8.2	10.0101	16.6717
171	14	8.5	10.7977	22.2210	708	124	8.6	13.0317	9.0000	1387	240	8.5	11.7687	24.8309
172	16	8.5	10.9856	22.3646	699	125	8.8	13.6138	7.8287	1374	242	8.9	13.5982	23.4212
16	18	6.4	11.4389	2.6032	809	127	8.6	13.8508	25.5919	1348	244	7.8	14.9509	19.4775
100	19	9.0	13.6900	13.6271	709	128	8.7	14.8716	9.0075	1294	248	8.9	17.9904	7.5503
102	26	7.8	18.3093	14.5494	801	129	9.0	17.0277	23.6021	1265	250	8.4	18.3750	1.3031
126	28	9.1	19.7627	16.1709	738	133	8.9	19.4732	12.7088	1321	251	9.3	18.3858	13.6790
119	29	6.6	20.0575	14.9017	720	134	8.5	19.5391	10.0616	1376	252	7.7	18.9522	23.4058
42	30	8.7	20.1645	7.3141	742	135	8.0	19.5430	14.3722	1296	254	8.7	21.5944	8.2360
19	31	8.6	20.6945	2.3826	765	137	8.8	21.4675	16.7960	1382	257	8.2	22.9428	24.1523
43	33	6.0	21.7275	6.9458	665	140	8.7	22.3010	2.9516	1301	260	8.4	23.5133	8.9252
106	34	8.8	22.4633	14.1196	774	141	9.1	23.3215	17.7783	1339	262	7.6	24.8532	17.5733
177	35	8.7	23.0616	22.0536	678	142	8.1	23.5752	5.1873					
31	36	8.6	24.0029	4.7647										
91	40	9.1	25.4001	12.9982										
<b>R.A. 0<sup>h</sup> 12<sup>m</sup></b>					<b>R.A. 0<sup>h</sup> 36<sup>m</sup></b>					<b>R.A. 1<sup>h</sup> 0<sup>m</sup></b>				
408	35	8.7	0.4698	22.0683	935	141	9.1	0.6811	17.7899	1554	257	8.2	0.3749	24.1683
279	36	8.6	1.2146	4.7691	870	142	8.1	0.7917	5.1963	1446	260	8.4	0.7723	8.9347
337	40	9.1	2.7052	12.9861	906	151	9.1	6.7391	13.4542	1509	262	7.6	2.2103	17.5672
257	41	8.0	3.9776	2.2349	937	152	8.4	6.8821	18.0200	1555	263	8.5	4.1175	24.4586
350	42	8.9	4.8390	14.0878	867	157	9.0	10.0744	3.5285	1488	269	9.0	10.4553	14.2349
401	45	8.8	5.5661	20.8770	859	158	9.0	10.6824	2.7012	1504	270	9.1	10.7391	16.1930
343	47	9.0	5.5736	12.8635	881	160	8.6	11.9844	6.2344	1415	271	9.0	11.4351	3.1937
385	48	4.6	6.1026	18.8564	878	164	8.8	16.2015	4.4653	1441	273	9.0	12.1905	6.8250
292	51	8.8	8.5528	6.6410	918	168	8.9	17.7839	14.9727	1464	274	8.7	12.4024	11.2811
386	52	9.0	9.5837	18.9994	960	169	8.6	17.9404	20.4317	1403	276	8.8	12.6837	1.1218
426	54	8.6	11.0248	24.4141	888	175	2.0	20.3096	7.4386	1513	282	8.9	16.5750	17.4806
317	55	8.8	11.3264	10.7097	855	182	9.0	23.9234	1.0323	1535	286	8.7	20.2267	21.1313
294	57	8.4	11.5239	6.4364	981	186	8.6	24.3267	23.1713	1553	288	8.0	20.9265	23.1219
281	61	8.9	13.1002	4.8406						1419	289	9.0	21.6218	3.1850
272	62	9.0	13.5343	3.6492						1525	291	9.0	22.7318	18.8427
397	63	6.9	14.3278	20.2837						1536	292	8.0	22.9631	21.4260
265	64	8.7	15.2864	2.4691						1558	295	9.1	24.5600	23.9244
429	69	9.4	17.7595	23.9929										
274	71	8.3	19.8625	3.8345										
263	74	9.0	21.4697	1.3892										
277	75	7.2	21.4793	4.0837										
<b>R.A. 0<sup>h</sup> 20<sup>m</sup></b>					<b>R.A. 0<sup>h</sup> 44<sup>m</sup></b>					<b>R.A. 1<sup>h</sup> 8<sup>m</sup></b>				
490	79	9.0	4.9214	5.4415	1052	182	9.0	1.0928	1.0376	1722	292	8.0	0.3642	21.4417
566	82	7.4	8.3571	18.3499	1194	186	8.6	1.7476	23.1709	1744	295	9.1	1.9893	23.9211
492	84	7.0	9.9386	5.3946	1086	188	8.9	3.5157	6.2894	1745	298	8.7	3.5305	24.1209
541	86	7.0	12.3723	13.2928	1105	194	8.9	6.3995	9.8388	1603	300	8.9	4.1293	1.9155
533	87	8.9	12.6893	12.2000	1203	195	8.9	6.5572	24.7111	1604	301	9.0	4.1799	1.3112
455	89	7.1	13.9351	0.7612	1111	197	8.9	6.9751	11.1447	1691	304	7.3	7.6874	17.0483
561	90	8.5	14.5241	17.4397	1155	198	8.7	7.3494	18.4831	1700	308	9.2	9.3184	18.2859
473	92	8.6	14.7689	2.4616	1094	201	6.0	9.4123	8.3044	1607	310	8.9	9.7102	1.8228
557	96	6.5	16.7298	15.9706	1142	203	8.9	11.6600	15.4981	1625	312	8.5	10.3720	5.1413
570	98	9.2	17.2794	18.3258	1132	204	8.4	12.2052	14.0558	1727	314	8.9	14.6718	21.3222
497	101	8.7	19.6593	5.8203	1060	205	8.1	12.2775	2.1072	1648	320	8.0	19.0436	9.5120
616	104	9.0	20.6419	23.4749	1170	209	9.0	13.8326	19.6481	1634	322	9.2	20.1197	6.8351
500	109	9.2	24.8619	5.5667	1148	211	8.9	14.9957	15.6400	1664	325	8.5	21.0163	12.3398
					1134	213	8.7	17.8260	13.6048	1650	329	9.0	23.9312	9.1930
					1136	216	8.9	20.2335	13.6494	1696	333	8.9	25.4968	17.7003
					1209	219	8.7	21.7446	24.6092	1718	334	8.5	25.6286	19.6957
					1173	223	9.1	23.3980	19.6528					
					1137	225	8.4	23.8060	14.4538					
					1068	226	7.9	24.8777	3.3768					







Reference No.      Mag.      Standard co-ordinates, 1900-0.					Reference No.      Mag.      Standard co-ordinates, 1900-0.					Reference No.      Mag.      Standard co-ordinates, 1900-0.				
Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.	
<b>R.A. 2<sup>h</sup> 20<sup>m</sup> (continued)</b>					<b>R.A. 2<sup>h</sup> 44<sup>m</sup> (continued)</b>					<b>R.A. 3<sup>h</sup> 8<sup>m</sup> (continued)</b>				
3396	640	8.6	12.1490	8.3858	4076	753	9.0	11.1753	10.0908	4696	864	8.8	4.4721	6.3755
3495	653	9.1	18.1803	19.4824	4184	754	9.1	11.5456	22.4324	4811	865	8.9	4.5793	17.9499
3454	656	7.8	24.8995	13.8323	4114	756	8.8	11.9383	14.2030	4739	866	9.1	4.6710	10.9752
3443	660	8.3	25.6185	12.7898	4163	757	9.1	12.5152	17.8775	4855	868	7.7	5.2949	23.0723
3505	661	7.9	25.6197	21.8453	4164	759	8.3	13.8124	18.3116	4664	869	9.1	5.5415	3.2256
<b>R.A. 2<sup>h</sup> 28<sup>m</sup></b>					4093	766	9.0	16.8917	11.5741	4725	875	8.8	8.1662	9.3797
3629	656	7.8	2.2142	13.8260	4179	771	9.0	19.8825	20.7123	4658	881	8.9	10.6256	2.0641
3620	660	8.3	2.9212	12.7754	4082	778	8.0	22.5700	10.2896	4752	882	9.2	10.9491	12.0188
3686	661	7.9	3.0253	21.8298	4047	779	8.1	23.7527	6.0862	4782	884	9.1	11.8162	15.4300
3580	667	9.1	9.6884	6.1744	4130	780	9.1	23.7621	14.9826	4716	886	9.0	13.2943	8.0752
3614	669	9.0	11.7981	11.9341	4090	782	8.8	24.7252	11.3101	4745	887	8.8	14.0010	10.7633
3589	671	9.2	12.7885	6.8192	<b>R.A. 2<sup>h</sup> 52<sup>m</sup></b>					4757	889	9.0	14.4602	11.9912
3608	673	8.7	14.3235	10.5571	4273	779	8.1	0.9794	6.0931	4655	890	8.9	14.5927	1.0591
3558	675	8.0	15.1926	1.3814	4329	780	9.1	1.0899	14.9892	4656	891	8.9	15.4456	0.9139
3605	676	8.8	15.2107	10.3959	4299	782	8.8	2.0112	11.3060	4774	893	8.6	16.0479	13.9559
3711	678	8.5	16.2701	25.6365	4322	785	9.1	4.3585	14.2221	4676	894	8.2	17.2306	3.8748
3683	680	8.7	18.0076	20.8801	4343	791	8.9	10.1480	16.4011	4691	898	9.1	20.7907	4.7880
3677	684	8.9	22.0671	19.9598	4370	792	8.9	10.2957	19.5211	4720	900	7.5	21.3039	7.5466
3559	685	7.5	22.3246	1.8451	4333	795	9.0	11.0466	14.9353	4848	902	9.0	21.7734	21.5931
<b>R.A. 2<sup>h</sup> 36<sup>m</sup></b>					4324	796	8.7	12.4463	14.2761	4735	904	8.3	22.2194	9.8236
3854	698	9.1	6.2213	14.8092	4383	799	8.7	15.9111	21.5254	4849	905	9.0	22.1660	21.6163
3804	701	8.9	8.1389	8.5024	4303	800	9.3	16.5685	11.0732	4785	906	9.2	22.5183	15.5709
3887	704	8.8	10.3026	18.0293	4256	802	9.0	17.5306	1.6425	4721	907	9.0	22.7080	8.2881
3776	706	9.2	11.3404	4.7810	4282	804	9.0	21.0119	7.4203	4850	909	8.0	23.0096	21.7222
3855	708	8.4	12.9202	15.1593	4400	808	9.1	22.5826	23.6716	<b>R.A. 3<sup>h</sup> 16<sup>m</sup></b>				
3838	711	8.7	14.1883	13.3694	4346	809	9.2	23.0023	16.2358	5117	909	8.0	0.4140	21.7374
3794	712	8.8	14.5062	6.7967	4267	814	7.4	25.8154	4.1849	5096	913	9.1	3.6240	19.9119
3768	713	7.9	14.5420	3.9794	<b>R.A. 3<sup>h</sup> 0<sup>m</sup></b>					4992	915	8.9	4.0211	10.1132
3785	714	9.2	15.6461	5.4401	4545	809	9.2	0.3444	16.2511	4985	916	9.1	4.1049	8.6156
3945	715	8.7	15.7969	25.0610	4466	814	7.4	3.0203	4.1695	4902	917	8.8	4.4703	1.1603
3889	718	9.1	17.5115	18.0441	4461	816	9.2	4.1172	2.4053	4904	918	9.0	5.9000	1.0107
3906	719	9.0	17.6458	20.7030	4594	818	8.2	5.4501	21.9357	5076	919	8.9	6.2324	18.1961
3932	720	8.8	17.8981	23.2504	4491	819	7.0	5.7421	8.2248	4905	920	9.3	6.4737	0.8856
3769	723	9.0	18.6271	3.4860	4484	823	9.0	6.7848	7.3301	5019	921	9.1	6.7762	12.7804
3925	727	8.7	20.0500	22.3489	4513	825	9.1	7.8606	11.0003	5008	923	6.2	7.6623	12.0801
3890	728	8.8	20.1333	18.6682	4498	827	8.5	8.5748	8.4854	5043	926	7.2	10.8233	15.4865
3814	729	8.5	20.3297	10.4750	4521	828	8.8	8.8050	11.7887	..	927	8.8	11.1296	0.0750
3816	731	9.0	22.3748	10.4107	4486	829	8.7	8.9003	6.5998	4960	929	8.9	11.9042	5.3680
3771	733	8.7	25.3028	3.4829	4611	830	8.2	9.4303	24.9185	5154	930	9.0	12.8403	25.9312
3756	734	8.1	25.5161	1.0551	4603	832	8.4	10.3375	24.7027	5121	936	9.2	16.8337	22.0596
3841	735	4.8	25.5751	12.9919	4462	834	7.8	11.2402	2.5432	5081	940	8.8	19.2881	18.4876
<b>R.A. 2<sup>h</sup> 44<sup>m</sup></b>					4452	841	9.1	13.7179	0.4280	5116	941	9.2	19.4714	21.1120
4030	733	8.7	2.4999	3.4731	4562	842	7.3	14.8409	18.6200	5004	946	8.7	23.8397	10.9532
4001	734	8.1	2.6855	1.0433	4468	845	9.0	16.6492	3.4099	5016	949	9.1	25.6682	12.0362
4099	735	4.8	2.8802	12.9779	4580	846	9.2	17.1454	19.9594	<b>R.A. 3<sup>h</sup> 24<sup>m</sup></b>				
4146	740	9.0	6.9402	16.7992	4590	847	8.8	17.2056	21.1059	5262	946	8.7	1.1217	10.9590
4050	742	8.6	7.0414	6.5551	4542	850	8.4	19.2997	14.9601	5272	949	9.1	2.9624	12.0214
4084	743	9.1	7.1220	11.3979	4481	852	8.5	21.3991	5.8731	5207	951	8.7	4.4504	1.6206
4150	746	9.0	8.4770	17.5681	4592	853	9.1	22.0300	21.1726	5263	954	8.2	6.0074	10.5044
4113	748	9.2	9.5125	13.8618	4593	855	7.6	23.1843	21.2621	5313	955	8.9	6.5607	15.9006
4002	749	8.8	9.5113	0.6708	4558	860	7.3	25.2868	17.2588	5237	958	8.8	7.5108	7.8863
4075	751	8.8	10.1911	9.8300	<b>R.A. 3<sup>h</sup> 8<sup>m</sup></b>					5283	960	9.3	7.9812	12.8606
4067	752	9.0	10.7688	9.3592	4841	855	7.6	0.5835	21.2751	5284	961	8.9	8.8701	12.8442
					4796	860	7.3	2.6404	17.2477	5295	962	8.7	9.2179	13.5293
					4790	862	9.0	3.2405	16.1649	5287	967	8.7	13.3617	12.9700
										5257	968	8.5	13.3826	9.6803
										5243	969	8.8	13.4067	7.8979



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
<b>R.A. 3<sup>h</sup> 24<sup>m</sup> (continued)</b>					<b>R.A. 3<sup>h</sup> 48<sup>m</sup> (continued)</b>					<b>R.A. 4<sup>h</sup> 4<sup>m</sup> (continued)</b>				
5216	973	9.0	14.5214	3.5523	5928	1091	8.7	4.0914	3.9920	6682	1225	9.0	8.6258	19.7865
5217	974	8.9	15.2953	3.9148	5948	1092	9.1	4.1175	5.2565	6484	1226	8.9	8.6129	3.7931
5370	976	7.9	15.6153	23.8035	5983	1096	8.5	4.4950	8.2109	6503	1228	9.2	9.2564	5.5441
5298	977	9.1	16.1705	13.8072	6150	1097	8.9	5.0648	25.0486	6695	1231	8.9	12.7707	21.1461
5371	979	9.0	16.9994	23.6593	6032	1101	7.7	6.6204	13.6019	6560	1235	9.0	13.4995	9.9841
5377	980	9.0	17.0703	24.6414	6050	1105	8.6	9.3899	15.5499	6453	1236	8.9	13.6320	1.0779
5218	981	8.8	18.6322	3.5570	5924	1107	9.0	11.0081	2.3244	6485	1238	8.0	13.9966	3.5219
5332	982	8.9	18.9817	18.1315	6012	1109	8.9	11.9705	11.5043	6658	1240	8.5	14.3781	17.7543
5367	983	7.6	19.1324	22.3391	5961	1115	8.9	14.0233	6.8858	6673	1241	8.8	14.4339	19.5857
5266	984	7.3	19.5086	10.6942	5995	1117	6.6	14.3105	10.0884	6675	1249	6.8	17.0849	19.5972
5231	986	8.9	20.3555	6.4323	5997	1120	6.9	15.0608	9.7821	6637	1250	7.5	17.3647	16.1732
5269	987	8.7	22.2835	10.9036	6103	1122	8.8	15.2967	20.0173	6599	1251	8.4	17.4570	12.6813
5358	988	8.5	22.3629	20.8958	5979	1126	8.9	18.1680	7.4334	6648	1253	8.5	17.7415	17.3128
5350	992	9.0	25.5227	20.1847	5956	1128	8.7	18.6336	5.3964	6462	1255	8.7	19.3513	1.4575
<b>R.A. 3<sup>h</sup> 32<sup>m</sup></b>					6120	1130	8.8	18.9160	21.1854	6649	1256	8.6	19.6023	17.2655
5569	992	9.0	2.9095	20.1705	6128	1140	9.0	21.8865	22.3014	6700	1257	9.0	19.7720	21.2006
5461	994	8.7	3.1878	10.0470	5908	1141	8.3	22.1801	0.9106	6546	1258	8.1	20.4541	9.2433
5543	995	9.0	4.7553	17.8365	6129	1144	7.7	22.3872	21.7384	6561	1260	9.0	21.3675	10.3725
5479	1006	8.1	12.1366	11.5522	6135	1146	8.9	23.7529	23.4803	6477	1264	8.4	23.0130	2.5444
5580	1008	8.0	12.7966	21.4931	5919	1150	9.0	25.4548	1.3554	6498	1265	8.7	23.2087	5.0171
5423	1010	9.1	14.0574	3.4650	<b>R.A. 3<sup>h</sup> 56<sup>m</sup></b>					6703	1268	8.6	23.4618	21.3303
5424	1011	8.6	14.7813	3.4662	6411	1146	8.9	1.1773	23.4866	6538	1269	8.6	23.9379	8.0509
5404	1015	9.1	17.0572	0.8640	6212	1150	9.0	2.6276	1.3441	6589	1270	8.6	25.2481	11.8677
5511	1018	8.6	18.6145	13.8912	6299	1151	8.4	3.2291	11.1396	<b>R.A. 4<sup>h</sup> 12<sup>m</sup></b>				
5540	1024	7.9	21.5265	16.9044	6263	1154	8.9	5.3114	6.7715	6830	1264	8.4	0.1994	2.5595
5614	1029	7.1	23.5435	24.0335	6264	1156	8.7	6.1410	6.5202	6848	1265	8.7	0.4232	5.0301
5595	1030	8.7	24.4545	21.9827	6390	1157	9.0	6.2657	21.6393	7062	1268	8.6	0.8618	21.3400
<b>R.A. 3<sup>h</sup> 40<sup>m</sup></b>					6203	1159	9.1	7.0007	0.3972	6883	1269	8.6	1.1870	8.0558
5834	1029	7.1	0.9742	24.0424	6229	1160	9.1	7.3630	3.6940	6935	1270	8.6	2.5404	11.8576
5817	1030	8.7	1.8619	21.9810	6339	1162	8.9	9.2169	15.7199	7042	1274	8.9	4.7467	20.0831
5818	1032	6.9	2.2229	22.5917	6280	1163	9.3	9.4002	8.6661	6852	1277	8.4	5.3357	4.7124
5710	1034	9.2	2.7713	9.6407	6281	1164	9.1	9.5307	8.7826	6968	1283	8.9	8.1402	14.4682
5669	1035	8.9	3.4245	3.5820	6230	1167	8.4	10.9369	3.3608	6807	1284	9.2	9.1137	0.4573
5807	1037	8.6	3.7821	21.5769	6376	1168	7.4	11.7380	19.3513	6855	1287	9.2	10.5399	4.6497
5836	1038	7.0	4.2663	23.8873	6359	1169	9.2	11.8261	18.5784	6922	1288	6.9	11.1143	11.6852
5722	1041	9.3	6.1933	10.8845	6249	1171	9.2	13.0849	5.9101	6888	1289	8.8	11.4759	8.0988
5771	1043	8.7	6.4845	16.8436	6240	1178	9.4	15.7124	4.4687	6822	1293	7.6	12.5314	2.4826
5753	1046	8.6	7.8439	14.6180	6241	1179	9.2	15.8813	4.5766	7097	1295	9.0	13.4628	23.2472
5732	1048	8.0	8.0265	13.3732	6305	1180	8.8	16.2073	10.5916	7067	1297	8.8	15.3820	21.5209
5703	1051	8.8	9.8345	8.8641	6252	1181	8.9	16.6688	5.9583	7013	1299	9.1	15.6590	17.4926
5784	1053	7.8	11.3072	18.1825	6283	1182	7.9	16.8593	8.7729	7080	1300	8.3	15.6644	22.2507
5699	1058	9.0	13.1298	8.2676	6406	1187	7.9	18.8600	22.3169	7068	1301	9.0	16.0093	21.9682
5691	1060	8.8	14.5000	5.5566	6352	1188	8.8	19.3313	16.8913	7024	1305	8.5	18.3788	18.7409
5786	1061	8.5	14.5653	18.3808	6353	1190	9.4	19.6979	17.2052	..	1310	8.3	19.5459	0.4280
5787	1064	9.1	15.2451	18.4614	6354	1193	9.7	19.8471	17.4283	7053	1311	9.3	19.5528	20.7008
5762	1070	8.9	16.6679	16.4132	6276	1199	9.0	22.2839	7.8583	6824	1312	7.0	20.2501	2.1344
5763	1074	9.1	18.5700	15.9469	6258	1201	8.9	22.7651	6.0092	6914	1315	7.9	22.5033	10.1712
5791	1077	8.9	20.4831	18.5425	6408	1204	7.6	23.9170	21.9519	6814	1316	8.5	24.6770	0.7782
5748	1078	9.1	20.6589	14.4031	6236	1210	9.0	25.5093	3.7429	7035	1320	6.7	25.5243	19.9331
5847	1081	9.1	23.1494	24.6793	<b>R.A. 4<sup>h</sup> 4<sup>m</sup></b>					<b>R.A. 4<sup>h</sup> 20<sup>m</sup></b>				
<b>R.A. 3<sup>h</sup> 48<sup>m</sup></b>					6705	1204	7.6	1.3241	21.9564	7155	1316	8.5	1.8434	0.7755
6149	1081	9.1	0.5875	24.6927	6479	1210	9.0	2.7093	3.7308	7389	1320	6.7	2.9083	19.9188
6063	1089	9.3	3.3276	16.7926	6457	1215	8.9	6.2247	2.2254	7434	1321	8.8	3.2664	23.4710
5940	1090	8.6	3.5715	4.3386	6466	1216	9.5	6.3807	2.2463	7369	1322	8.0	3.3440	18.8188
					6708	1218	7.2	6.9083	22.4013	7454	1323	9.1	3.4037	25.7098
					6492	1220	7.0	7.6819	4.8437	7425	1326	9.0	4.2938	22.4331
					6629	1221	9.0	7.7331	16.4921	7304	1329	8.9	5.9314	13.6212



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
<b>R.A. 4<sup>h</sup> 20<sup>m</sup> (continued)</b>					<b>R.A. 4<sup>h</sup> 36<sup>m</sup> (continued)</b>					<b>R.A. 4<sup>h</sup> 52<sup>m</sup> (continued)</b>				
7435	1330	8.2	6.5909	23.3509	7964	1444	7.4	7.6499	23.0836	8614	1574	8.8	22.2970	15.0232
7402	1331	8.3	6.8415	20.8799	7840	1446	8.8	8.1396	11.5079	8534	1576	8.1	22.5439	10.7002
7187	1332	8.9	7.4462	3.3667	7879	1448	8.7	8.7558	14.0282	8577	1579	8.8	23.0385	12.7063
7307	1333	8.7	7.5047	14.2515	7975	1449	8.8	9.2700	24.1056	8750	1580	7.9	24.1981	22.4596
7324	1337	8.8	9.3579	14.8656	7906	1452	8.5	10.0320	17.1000	8616	1582	9.0	24.7634	14.5462
7336	1342	9.0	10.9243	16.3218	7780	1455	8.8	11.3646	4.6655					
7406	1343	8.0	10.9357	21.4653	7802	1458	9.0	12.2327	6.8622					
7251	1347	8.9	12.0322	10.1535	7966	1462	5.0	13.1876	23.3605					
7252	1352	8.9	15.7677	10.1566	7978	1463	9.3	14.2934	23.9663					
7171	1355	8.0	17.3974	2.1153	7939	1466	8.8	15.8087	20.6537					
7443	1357	8.8	18.1568	23.6120	7767	1471	8.6	19.5069	2.5986					
7233	1361	8.1	19.7467	8.3101	7768	1472	8.7	19.8888	2.8146					
7280	1362	7.2	19.9438	11.5930	7755	1473	8.8	19.9157	1.1969					
7432	1364	9.1	20.4083	22.5580	7981	1476	9.2	20.1553	24.7342					
7173	1365	9.1	20.5823	1.7790	7847	1484	5.5	23.5536	11.2540					
7317	1367	9.3	21.6116	14.5884	7873	1488	8.8	24.1592	12.9964					
7398	1368	8.1	22.3111	19.9869	7874	1489	8.5	24.4170	13.0660					
7206	1369	8.4	22.4994	4.9084	7883	1490	8.5	24.7325	14.0146					
7160	1370	8.7	22.5865	0.7768										
7177	1371	7.1	23.0021	1.7835										
7418	1374	5.2	25.0060	21.1589										
<b>R.A. 4<sup>h</sup> 28<sup>m</sup></b>					<b>R.A. 4<sup>h</sup> 44<sup>m</sup></b>					<b>R.A. 5<sup>h</sup> 0<sup>m</sup></b>				
7508	1371	7.1	0.1799	1.7987	8126	1484	5.5	0.8391	11.2630	8945	1579	8.8	0.3404	12.7210
7684	1374	5.2	2.4040	21.1506	8159	1488	8.8	1.4644	12.9986	9052	1580	7.9	1.6109	22.4608
7559	1375	8.1	3.7510	9.3671	8160	1489	8.5	1.7230	13.0651	8971	1582	9.0	2.0862	14.5414
7584	1379	9.0	5.2633	12.4893	8179	1490	8.5	2.0493	14.0101	8988	1586	9.1	4.0906	15.7091
7502	1381	8.9	6.6989	1.0885	8051	1494	8.7	3.6087	5.1850	8874	1587	8.5	4.1179	7.1744
7517	1386	8.9	8.7923	3.0536	8003	1499	7.9	7.2910	1.0718	8824	1592	9.1	4.7727	1.4887
7690	1387	8.7	9.6663	21.2893	8064	1500	9.1	7.9951	6.1128	9071	1596	7.4	6.0727	22.7024
7613	1389	9.0	11.7190	14.0107	8089	1502	7.3	8.5083	7.9509	8898	1598	8.8	7.6255	8.4093
7708	1391	9.0	11.8844	23.3604	8065	1510	8.7	12.6689	6.1848	8993	1602	9.0	9.7148	16.1484
7602	1395	8.6	12.6515	12.6177	8334	1511	7.7	12.8857	23.8741	9044	1604	8.6	10.2097	20.7044
7505	1397	7.9	13.0576	0.4383	8349	1513	7.8	13.0921	25.3465	8858	1605	8.6	10.4565	5.1232
7527	1398	8.9	13.3365	5.1923	8351	1516	8.7	15.9466	25.7905	9003	1607	8.9	10.4992	17.1924
7709	1400	8.8	14.3920	22.8005	8221	1519	8.7	19.0403	15.7560	8953	1612	8.9	13.3044	13.1187
7677	1401	7.9	15.0716	19.8454	8193	1520	7.5	19.6449	13.8488	9061	1613	8.6	13.4080	22.2008
7721	1405	8.8	15.8021	24.6609	8108	1521	9.1	20.4268	9.3269	8828	1614	7.5	13.5659	1.2870
7537	1408	7.5	17.1826	5.7062	8079	1523	8.7	21.1471	7.1818	8829	1616	8.4	13.7368	1.9589
7590	1409	9.0	17.1936	11.5587	8291	1527	9.1	23.7059	19.8101	8878	1629	9.0	19.2173	6.3229
7654	1410	8.5	17.2737	17.6538	8144	1528	9.0	24.8015	11.1396	8870	1632	8.9	20.8534	6.2277
7507	1414	9.1	19.5875	0.2025						9029	1633	6.9	20.9456	19.4061
7655	1415	8.7	19.7464	17.9301						8846	1634	8.7	22.0209	2.7757
7656	1420	8.9	22.4172	18.1628						8985	1635	8.6	22.1860	15.0234
7511	1425	9.4	23.3554	2.0573						8930	1636	8.9	22.3208	11.0382
7594	1426	8.9	23.3523	12.1880						8854	1642	8.0	24.7104	4.0240
7558	1429	8.8	25.1481	7.9230										
7512	1430	8.8	25.2262	2.0939										
<b>R.A. 4<sup>h</sup> 36<sup>m</sup></b>					<b>R.A. 4<sup>h</sup> 52<sup>m</sup></b>					<b>R.A. 5<sup>h</sup> 8<sup>m</sup></b>				
7758	1425	9.4	0.5363	2.0687	8687	1527	9.1	1.0886	19.8172	9155	1642	8.0	1.9137	4.0207
7849	1426	8.9	0.6484	12.1993	8521	1528	9.0	2.0856	11.1346	9131	1644	8.7	3.1951	1.4529
7807	1429	8.8	2.3956	7.9144	8420	1532	8.9	3.2603	4.3076	9250	1654	8.0	7.7849	10.4534
7759	1430	8.8	2.4075	2.0851	8556	1533	8.6	3.4028	12.9007	9325	1657	8.8	9.4522	16.3446
7973	1435	9.1	4.8104	24.2279	8375	1538	8.7	4.7295	0.9136	9326	1658	8.5	9.4905	16.3995
7798	1438	7.0	5.3479	7.3882	8421	1542	9.1	6.4336	4.1701	9313	1663	9.0	11.1483	14.6066
7751	1439	7.2	6.2098	1.1995	..	1548	8.6	10.5062	0.0932	9184	1664	8.6	11.3126	5.5761
7865	1443	8.8	7.5634	13.4287	8511	1549	9.3	10.5452	9.7542	9314	1665	9.0	11.5702	14.7885
					8778	1550	8.8	10.8480	23.8922	9300	1666	9.1	13.6132	14.4098
					8642	1556	8.7	14.0595	17.3653	9365	1668	8.5	13.7391	18.8715
					8424	1558	8.0	14.7626	4.2290	9261	1669	9.0	14.0184	10.8913
					8484	1559	8.8	14.8061	7.5940	9138	1673	8.5	15.1943	1.9722
					8491	1561	8.4	15.2804	9.4032	9174	1674	8.5	15.3109	4.3545
					8459	1564	8.7	16.4216	6.2593	9243	1675	7.6	15.9350	9.1031
					8492	1565	8.9	16.9422	8.5191	9210	1682	7.6	18.9482	7.0202
					8383	1568	6.5	19.5998	0.5280	9318	1685	8.0	21.6099	15.0877
					8445	1569	8.9	19.7765	4.5376					
					8575	1571	9.0	19.9655	12.9642					
<b>R.A. 5<sup>h</sup> 16<sup>m</sup></b>														
										9566	1695	8.1	5.1770	10.2448
										9462	1696	8.9	5.1690	0.6775
										9500	1697	8.7	5.3044	3.9647
										9704	1698	8.0	5.4947	19.9251
										9529	1699	8.9	6.2152	6.4373
										9568	1700	8.2	6.2672	9.6364



Reference No.					Reference No.					Reference No.				
Hyd.		Mag.	Standard co-ordinates, 1900-0.		Hyd.		Mag.	Standard co-ordinates, 1900-0.		Hyd.		Mag.	Standard co-ordinates, 1900-0.	
Algers.			ξ.	η.	Algers.			ξ.	η.	Algers.			ξ.	η.
<b>R.A. 5<sup>h</sup> 16<sup>m</sup> (continued)</b>					<b>R.A. 5<sup>h</sup> 32<sup>m</sup> (continued)</b>					<b>R.A. 5<sup>h</sup> 48<sup>m</sup> (continued)</b>				
9581	1701	8.7	7.2793	11.1151	10,269	1820	7.8	6.8562	5.8862	11,517	1935	8.9	1.7914	13.7069
9501	1704	6.5	8.4107	3.8463	10,380	1822	6.9	7.0303	11.5639	11,264	1940	8.6	3.6013	2.0807
9750	1707	8.6	9.3955	24.6398	10,535	1826	9.5	9.4912	18.1190	11,587	1943	7.8	4.1418	18.2009
9557	1710	6.7	9.8817	8.4880	10,496	1827	8.6	9.3951	16.0816	11,403	1947	8.9	6.0120	9.3690
9545	1711	9.2	10.0729	7.9624	10,681	1828	8.2	11.5269	25.1302	11,326	1950	8.7	6.6102	4.7465
9707	1720	9.1	12.0901	20.3833	10,364	1829	8.6	12.2297	10.0941	11,252	1953	9.0	7.1007	0.5926
9693	1721	8.9	13.4049	19.0992	10,610	1832	8.2	14.4230	21.5270	11,427	1954	8.8	7.4113	10.0797
9732	1725	7.6	14.6624	22.4606	10,666	1833	8.3	14.9127	24.8691	11,406	1957	8.9	8.7454	8.6731
9710	1728	9.1	15.4805	19.8665	10,667	1834	8.5	14.9267	24.0432	11,429	1958	8.9	9.1460	10.0256
9597	1729	9.2	17.3705	12.2325	10,407	1835	8.6	15.1302	12.6185	..	1961	8.5	10.3122	0.1392
9507	1731	8.7	18.5846	3.5771	10,317	1836	9.1	16.5094	7.5906	11,667	1962	8.9	10.5662	22.6455
9754	1732	7.9	19.3737	24.7065	10,369	1838	8.5	18.2189	10.2670	11,522	1963	8.8	10.6122	14.3104
9755	1733	8.6	19.4240	24.4233	10,248	1843	9.0	19.2445	3.8485	11,431	1966	8.9	11.2314	10.3435
9685	1741	9.0	23.3510	17.6398	..	1848	8.8	21.3843	0.0887	11,594	1968	7.7	11.4890	17.9540
9498	1742	8.9	23.9844	3.1081	10,653	1849	8.5	21.7332	23.1414	11,524	1969	7.4	12.5998	13.9397
9686	1743	9.3	24.2328	17.7130	10,373	1850	8.5	22.4003	10.3405	11,274	1974	9.0	15.1195	1.7268
9671	1746	8.9	24.8205	16.7163	10,324	1853	8.8	23.0168	8.0458	11,702	1975	9.1	15.3858	23.8510
<b>R.A. 5<sup>h</sup> 24<sup>m</sup></b>					10,416	1856	8.6	23.3025	12.5958	11,296	1980	8.8	17.1317	3.0201
10,072	1741	9.0	0.7090	17.6510	10,505	1857	7.7	24.2180	16.3253	11,651	1981	6.9	17.6148	20.9056
9,796	1742	8.9	1.1773	3.1126	10,620	1858	8.7	24.3403	21.7080	11,652	1984	7.9	19.1193	21.6775
10,074	1743	9.3	1.5917	17.7141	10,376	1859	8.7	24.6738	10.6251	11,489	1985	8.5	19.5872	11.5448
10,053	1746	8.9	2.1680	16.7106	10,283	1866	8.8	25.5910	6.3288	11,513	1988	7.7	22.1592	12.7317
10,075	1750	7.5	3.5329	18.5905	<b>R.A. 5<sup>h</sup> 40<sup>m</sup></b>					11,278	1990	8.8	22.5107	1.3184
9,927	1751	8.6	3.7048	10.7374	10,872	1853	8.8	0.2658	8.0609	11,547	1991	8.8	23.0858	15.1267
10,056	1752	8.7	4.6457	17.4782	10,965	1856	8.6	0.6032	12.6076	11,343	2005	8.5	25.4615	4.7086
10,143	1756	8.3	6.3420	22.3332	11,025	1857	7.7	1.5611	16.3266	<b>R.A. 5<sup>h</sup> 56<sup>m</sup></b>				
10,144	1757	7.0	6.4081	22.4023	11,133	1858	8.7	1.7445	21.7074	12,116	1991	8.8	0.4153	15.1410
10,121	1758	8.7	7.1655	20.6894	10,923	1859	8.7	1.9521	10.6215	11,883	2005	8.5	2.6725	4.6969
9,987	1764	8.9	9.4297	14.3315	10,830	1866	8.8	2.8203	6.3212	12,143	2008	8.6	3.7562	15.8017
10,016	1765	8.5	9.7018	15.1677	10,992	1867	8.8	3.3471	14.5973	11,823	2010	7.0	4.8991	1.8147
9,815	1766	9.1	10.4968	3.6178	10,856	1869	8.2	4.0206	7.1668	12,184	2011	7.8	5.6470	17.7767
9,790	1770	8.1	11.6999	2.0448	10,972	1871	8.6	6.3385	13.3944	12,029	2015	8.8	6.8072	10.5778
9,910	1772	8.8	12.2770	9.8998	10,762	1878	8.9	8.2721	1.4565	11,805	2016	8.7	6.8569	0.9708
10,124	1775	9.0	12.9114	20.2475	10,835	1879	8.5	8.6047	5.9081	12,095	2020	8.7	8.7968	13.9721
10,171	1776	8.8	13.0329	24.7384	10,755	1881	8.5	9.0093	0.7906	11,928	2028	8.8	11.8274	7.0501
10,022	1780	8.4	14.9768	15.6507	10,875	1884	5.5	10.1078	8.2360	12,307	2030	8.7	12.1233	23.2396
9,876	1781	8.8	15.1376	7.8874	11,141	1889	7.7	11.5274	21.3673	12,341	2034	9.1	12.5391	25.1780
9,894	1785	9.0	18.0953	8.6130	10,818	1893	7.6	12.1019	4.9595	11,894	2039	8.7	16.1478	4.4829
10,066	1786	9.0	18.5683	17.2383	10,783	1894	9.0	12.3936	2.3673	11,840	2042	8.6	16.8434	1.7539
9,895	1787	8.5	18.6703	9.0362	11,119	1895	8.5	12.3528	20.3561	11,931	2043	8.4	17.1188	7.2357
9,897	1788	8.5	19.5859	9.2220	11,097	1898	8.9	13.4995	19.4900	12,260	2046	8.3	18.2834	21.2976
10,116	1789	8.5	19.8903	19.0073	10,784	1901	8.8	13.9367	2.5304	12,346	2047	8.3	18.4772	25.2599
10,069	1795	8.9	21.9418	17.4315	10,979	1904	8.7	14.5738	13.5797	11,963	2048	8.2	18.7359	7.7967
9,805	1796	9.1	22.1607	3.1766	10,915	1914	8.6	17.9147	9.6143	11,915	2051	8.5	19.3637	5.7936
9,920	1797	8.4	22.5065	10.5087	10,823	1916	8.8	18.5924	5.2209	11,859	2053	8.6	19.6800	2.8757
10,034	1803	8.7	24.9847	15.1546	10,981	1920	8.7	19.5478	13.0428	12,239	2054	9.0	19.6428	19.8469
<b>R.A. 5<sup>h</sup> 32<sup>m</sup></b>					10,788	1924	9.0	20.2587	2.5137	12,265	2055	8.7	20.0356	21.6289
10,473	1803	8.7	2.3144	15.1472	10,808	1925	8.5	20.8034	3.4833	11,964	2062	8.9	22.8293	7.6301
10,474	1805	8.7	3.5686	14.8645	10,985	1927	8.5	21.9032	13.1759	12,086	2065	8.2	24.3331	13.0121
10,330	1810	8.7	4.0422	8.6019	10,901	1928	8.8	22.8296	8.8240	12,164	2066	8.8	24.7629	16.3109
10,512	1811	8.0	4.6746	17.3801	10,792	1932	8.8	23.8984	3.3761	12,271	2067	8.5	24.8723	21.7114
10,243	1813	8.8	5.4136	4.2166	11,216	1933	8.5	23.8798	25.7348	11,816	2068	8.0	25.4814	0.4387
10,356	1814	8.5	5.4719	9.9886	10,921	1934	9.0	24.5285	9.8775	11,847	2071	7.9	25.6592	1.9015
10,288	1815	9.0	5.6900	7.1971	11,003	1935	8.9	24.4781	13.7084	12,222	2072	8.4	25.6868	18.8489
10,552	1816	8.8	5.8594	19.0100	<b>R.A. 5<sup>h</sup> 48<sup>m</sup></b>					<b>R.A. 6<sup>h</sup> 4<sup>m</sup></b>				
10,553	1817	8.9	6.0393	18.8019	11,302	1932	8.8	1.0943	3.3817	12,738	2065	8.2	1.6384	13.0123
<b>R.A. 5<sup>h</sup> 48<sup>m</sup></b>					11,709	1933	8.5	1.3299	25.7395	12,830	2066	8.8	2.1058	16.3059
11,302	1932	8.8	1.0943	3.3817	11,423	1934	9.0	1.7983	9.8756	13,006	2067	8.5	2.2765	21.7047



Reference No.      Mag.      Standard co-ordinates, 1900-0.					Reference No.      Mag.      Standard co-ordinates, 1900-0.					Reference No.      Mag.      Standard co-ordinates, 1900-0.				
Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.	
<b>R.A. 6<sup>h</sup> 4<sup>m</sup> (continued)</b>					<b>R.A. 6<sup>h</sup> 20<sup>m</sup> (continued)</b>					<b>R.A. 6<sup>h</sup> 28<sup>m</sup> (continued)</b>				
12,405	2068	8.0	2.6438	0.4272	14,071	2200	8.8	3.2258	17.1117	14,357	2344	8.9	22.8901	3.7556
12,432	2071	7.9	2.8382	1.8879	13,737	2207	8.0	5.1135	2.4167	14,445	2347	8.2	24.3238	7.9709
12,904	2072	8.4	3.0583	18.8329	13,753	2208	9.0	5.1435	3.8763	14,633	2348	8.0	24.3126	17.9496
12,500	2076	9.2	5.2845	5.0960	14,174	2210	7.5	5.4010	22.5324	14,446	2349	6.5	24.3807	7.9645
12,714	2078	9.1	6.5038	11.6177	13,804	2212	8.8	5.7697	5.7611	14,359	2350	8.8	24.4347	4.2272
12,436	2079	8.7	6.6822	1.5481	13,722	2213	8.8	5.8098	1.4735	14,580	2354	4.3	25.2450	15.0806
12,437	2080	8.9	6.7014	1.4362	13,972	2214	9.1	5.9936	12.7726	<b>R.A. 6<sup>h</sup> 36<sup>m</sup></b>				
13,079	2084	8.8	8.9503	24.1382	13,913	2215	8.9	6.2198	10.7257	14,963	2347	8.2	1.5719	7.9715
12,778	2085	8.8	9.2712	13.9365	13,974	2216	9.2	6.6533	12.8038	15,248	2348	8.0	1.6742	17.9496
12,808	2092	5.8	11.1414	14.8522	13,998	2218	8.7	7.2911	13.5922	14,964	2349	6.5	1.6288	7.9645
13,019	2095	8.3	12.3741	22.1103	13,915	2223	8.9	8.6918	10.6259	14,865	2350	8.8	1.6403	4.2268
12,895	2096	8.6	12.4742	18.0075	13,861	2224	8.7	8.8055	7.9679	15,158	2354	4.3	2.5738	15.0702
12,783	2097	9.0	13.4499	13.9321	13,741	2225	8.5	9.6333	3.0613	15,037	2360	8.8	4.0738	11.1988
12,465	2100	6.7	15.6873	2.3046	13,951	2227	7.5	10.5929	12.3507	14,944	2361	8.4	4.0761	6.4072
12,568	2102	8.2	15.7345	6.7534	14,000	2230	9.2	10.9702	14.1100	15,347	2365	8.6	4.8567	21.5360
12,957	2106	8.9	16.3002	19.9227	14,183	2232	7.3	11.5070	21.8028	15,201	2367	8.9	5.5189	15.6975
12,751	2108	8.8	16.4379	12.7643	14,002	2233	9.1	11.7332	14.0464	14,847	2368	5.0	5.8508	2.8226
12,571	2116	8.9	19.7564	6.9950	14,222	2235	8.6	12.5661	24.4635	15,424	2372	9.1	7.6504	24.1639
12,598	2129	8.7	23.2231	7.8594	13,981	2236	9.0	13.2421	12.7887	14,869	2374	8.8	7.8789	4.2728
12,518	2133	8.8	25.2952	4.4199	14,164	2239	8.8	14.5529	20.9687	14,827	2378	7.2	9.1703	2.1650
<b>R.A. 6<sup>h</sup> 12<sup>m</sup></b>					13,810	2241	8.7	15.3297	6.1484	15,401	2381	9.2	11.2083	23.5030
13,262	2129	8.7	0.4699	7.8723	14,228	2244	8.3	16.4665	24.2475	15,143	2384	8.9	11.9600	13.9500
13,208	2133	8.8	2.5029	4.4101	13,869	2246	8.7	17.0257	8.0141	15,112	2387	8.0	12.6899	13.0563
13,341	2137	8.9	3.9415	10.9586	13,961	2249	8.3	17.9523	12.0185	15,434	2390	9.1	13.5000	24.7813
13,326	2141	8.9	5.5478	9.7684	14,060	2252	8.1	18.9917	16.1991	15,322	2394	9.2	15.6640	20.4469
13,225	2142	8.8	5.7021	5.8437	13,748	2253	8.9	19.1846	3.0932	15,331	2402	9.5	17.0884	19.9385
13,549	2144	8.6	6.5691	19.9587	13,932	2255	9.0	19.8390	11.2546	14,856	2403	8.6	17.2869	3.1237
13,532	2146	8.0	7.2947	18.9605	...	2257	9.0	19.9611	0.1760	15,118	2405	9.0	17.6802	12.6648
13,167	2147	8.5	8.1151	1.6363	13,989	2263	8.5	21.5591	12.6103	15,088	2408	9.1	18.3939	12.4483
13,562	2149	8.8	8.7520	21.2967	14,111	2269	7.6	22.2221	17.7261	14,857	2411	8.9	18.6301	3.2877
13,250	2151	6.5	9.9011	6.3254	13,991	2272	8.7	23.2502	13.4634	15,361	2412	8.9	18.6080	21.2276
13,253	2153	8.8	10.2682	6.5970	14,196	2276	7.7	24.1183	21.8341	15,120	2413	8.8	18.6736	13.0564
13,271	2155	8.8	10.4547	7.8678	14,150	2281	9.0	25.3168	20.5685	15,453	2414	9.0	18.6667	24.9071
13,535	2156	8.3	10.8747	18.5410	<b>R.A. 6<sup>h</sup> 28<sup>m</sup></b>					15,298	2419	9.1	19.5905	19.4242
13,588	2157	8.6	11.0593	22.2458	14,519	2272	8.7	0.5608	13.4758	15,211	2420	8.9	19.9391	16.0912
13,488	2163	8.7	13.0779	16.7827	14,686	2276	7.7	1.5239	21.8361	15,238	2423	8.7	20.8229	17.5100
13,230	2166	8.9	14.2891	5.8975	14,653	2281	9.0	2.7080	20.5567	14,858	2424	9.1	21.1160	2.4200
13,274	2167	8.0	14.4864	7.8595	14,726	2282	8.7	3.2747	24.7914	15,124	2426	8.3	21.1841	13.6288
13,539	2173	8.8	16.5235	18.8573	14,484	2284	8.8	3.7226	11.3173	14,841	2430	8.9	22.3543	2.0061
13,445	2174	7.2	16.9341	14.8182	14,383	2288	8.9	5.7175	6.2940	14,912	2431	8.7	23.7826	4.5905
13,278	2176	9.0	17.9982	7.2819	14,364	2289	9.0	5.7339	5.3121	14,940	2432	9.1	24.1950	5.7428
13,624	2177	6.0	18.3990	24.1470	14,386	2292	9.1	6.4846	5.8471	15,306	2436	7.5	24.8083	19.7189
13,233	2178	8.7	18.5156	5.5170	14,563	2295	6.5	6.8868	14.7668	14,821	2439	9.0	25.3209	1.1657
13,560	2183	9.2	21.7208	19.7346	14,329	2299	8.9	8.6741	2.4036	15,097	2441	7.3	25.4130	12.4444
13,519	2184	8.8	21.8249	18.3718	14,568	2303	9.0	10.8297	14.9162	15,128	2443	9.3	25.5273	13.0623
13,575	2187	9.0	22.6643	21.2799	14,303	2307	6.9	11.6426	0.8855	14,861	2444	9.2	25.6310	2.6025
13,477	2188	9.0	22.7487	15.8627	14,305	2311	9.1	13.0751	0.9631	14,962	2445	7.9	25.6991	6.6406
13,240	2189	8.8	22.8514	5.5271	14,735	2312	8.8	13.1866	24.7228	<b>R.A. 6<sup>h</sup> 44<sup>m</sup></b>				
13,523	2193	9.0	23.8489	18.3896	14,678	2314	9.0	13.6186	21.2875	15,589	2431	8.7	0.9923	4.5973
13,393	2195	9.4	25.1376	11.8231	14,679	2316	9.8	13.9608	21.4419	15,621	2432	9.1	1.4178	5.7449
13,318	2198	8.7	25.5415	9.0636	14,738	2317	8.6	14.2645	24.3572	16,026	2436	7.5	2.1899	19.7130
13,188	2199	9.0	25.6551	2.7074	14,308	2319	8.7	15.8146	1.0150	15,502	2439	9.0	2.4915	1.1559
<b>R.A. 6<sup>h</sup> 20<sup>m</sup></b>					14,321	2321	9.1	16.3787	1.8458	15,780	2441	7.3	2.7118	12.4324
14,088	2193	9.0	1.2154	18.3951	14,756	2322	8.4	16.5226	25.7609	15,812	2443	9.3	2.8332	13.0489
13,941	2195	9.4	2.4295	11.8142	14,757	2326	8.9	18.5679	25.7900	15,543	2444	9.2	2.8180	2.5892
13,874	2198	8.7	2.8020	9.0505	14,474	2327	8.3	19.0952	9.8135	15,643	2445	7.9	2.9319	6.6262
13,735	2199	9.0	2.8432	2.6937	14,555	2328	9.0	19.7205	14.6921	15,547	2446	6.9	3.7771	2.9849
					14,718	2329	8.4	19.9010	23.5105					
					14,313	2331	9.0	20.0613	0.3882					
					14,649	2333	7.6	20.1141	19.8249					
					14,394	2342	9.0	22.2793	5.9869					



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
<b>R.A. 6<sup>h</sup> 44<sup>m</sup> (continued)</b>					<b>R.A. 6<sup>h</sup> 52<sup>m</sup> (continued)</b>					<b>R.A. 7<sup>h</sup> 0<sup>m</sup> (continued)</b>				
15,838	2448	9.2	4.4662	14.2190	16,977	2566	8.4	11.6728	20.5820	17,995	2712	9.0	20.4981	19.9641
15,783	2449	9.0	4.6241	12.4215	16,645	2568	9.0	12.2709	12.6428	17,454	2720	8.7	23.5869	8.4507
15,624	2458	8.4	6.1503	6.0485	17,109	2571	9.0	12.6902	24.0706	17,590	2723	8.6	24.2083	11.4099
15,625	2459	7.9	6.5540	5.8932	16,471	2572	8.7	13.2318	7.3562	17,386	2725	6.9	24.5464	6.3711
15,914	2461	9.0	6.7755	16.5033	17,083	2577	9.1	14.1858	23.0691	17,905	2726	9.0	24.5692	18.6935
15,668	2464	9.0	7.5498	7.5711	17,151	2578	9.0	14.5568	25.0167	17,778	2730	9.0	25.0604	15.1391
16,130	2465	7.3	7.6222	22.2604	16,982	2579	8.5	14.7624	19.9724	17,280	2731	8.6	25.3339	2.3724
15,647	2466	8.7	7.6134	7.2449	16,821	2581	6.9	14.8914	16.6562	17,860	2733	8.9	25.4849	17.6529
15,845	2467	9.3	7.6620	14.0744	16,341	2582	9.0	15.4753	2.3449	18,090	2734	8.4	25.6230	22.2062
15,692	2469	9.0	7.6681	8.7256	16,781	2587	8.6	16.8298	15.2607	17,246	2735	7.8	25.7642	1.3285
15,551	2470	9.3	7.7699	2.7088	17,116	2590	9.3	18.1042	24.7143	<b>R.A. 7<sup>h</sup> 8<sup>m</sup></b>				
15,817	2471	9.2	7.9681	12.9010	..	2591	8.9	18.1810	0.2002	18,545	2720	8.7	0.8405	8.4595
15,919	2474	8.9	8.6886	16.1614	17,119	2595	8.8	19.0236	24.5319	18,656	2723	8.6	1.4954	11.4116
15,693	2475	8.5	8.8612	9.2458	16,785	2598	8.8	19.7513	15.3375	18,465	2725	6.9	1.7763	6.3693
15,512	2477	8.9	9.3419	0.5998	17,121	2601	9.1	19.8714	24.4491	19,000	2726	9.0	1.9391	18.6906
16,031	2478	9.1	9.4335	19.3732	16,834	2602	9.2	20.0402	16.3180	18,852	2730	9.0	2.3899	15.1308
15,852	2485	9.0	10.5420	13.6918	17,123	2604	9.0	20.1792	24.7496	18,274	2731	8.6	2.5183	2.3623
15,819	2487	8.7	12.1922	13.2905	16,576	2610	8.9	21.7281	9.7546	18,951	2733	8.9	2.8429	17.6394
15,822	2488	9.1	12.4176	13.2538	17,091	2612	9.1	22.3421	23.9196	19,213	2734	8.4	3.0328	22.1904
16,165	2489	8.7	12.9600	23.8236	17,163	2617	6.9	23.7330	25.2621	18,254	2735	7.8	2.9366	1.3139
16,006	2491	9.0	13.7506	18.3472	17,038	2622	7.6	24.0289	20.9683	18,952	2736	9.0	3.3614	17.2575
15,577	2496	8.8	15.4601	3.4738	17,092	2623	8.7	24.2797	23.7380	19,358	2737	8.9	3.5116	25.4665
15,603	2497	8.3	15.5098	5.1741	17,067	2627	8.9	25.0539	22.3578	18,715	2743	7.5	5.0589	12.4695
15,604	2498	8.8	15.6704	4.6153	16,368	2628	8.5	25.2622	2.9705	19,010	2751	8.0	6.3075	18.0876
15,929	2500	8.3	16.8510	16.2542	<b>R.A. 7<sup>h</sup> 0<sup>m</sup></b>					18,283	2752	8.8	6.5377	1.6867
15,891	2501	9.0	17.1783	14.7953	18,005	2622	7.6	1.4248	20.9714	18,510	2753	6.8	6.6017	7.2889
16,228	2502	8.8	17.2413	25.5327	18,141	2623	8.7	1.7071	23.7381	18,475	2754	7.9	6.6962	5.6964
15,654	2506	9.2	17.9769	7.0612	18,050	2627	8.9	2.4655	22.3489	19,102	2755	9.0	6.8020	20.1479
15,895	2507	9.2	18.1802	15.5152	17,250	2628	8.5	2.4535	2.9612	19,011	2756	9.0	6.8127	18.2817
16,016	2508	9.0	18.3420	18.5668	17,252	2634	9.0	4.0124	2.8993	18,766	2757	7.4	6.8388	13.4533
15,934	2509	9.3	18.4004	15.6474	17,700	2639	8.6	4.8162	13.7139	18,257	2758	9.0	6.8611	1.1031
15,655	2510	9.0	18.5681	7.1181	17,205	2640	9.1	4.9705	0.8798	18,380	2759	8.6	7.0281	3.8511
15,610	2513	9.2	19.6145	4.5778	17,866	2641	8.3	5.2305	18.4953	18,592	2761	8.9	7.7499	9.4081
16,017	2518	8.0	20.5713	18.6505	17,290	2644	8.9	6.1154	3.3340	19,274	2763	9.1	8.4701	23.8237
15,611	2519	8.8	20.6910	4.7986	17,967	2647	8.2	8.0475	20.4944	19,324	2766	9.0	9.2014	24.1661
15,804	2520	7.5	20.8526	11.7646	17,653	2649	8.8	8.2959	13.1779	19,112	2767	8.8	9.2606	20.6416
16,091	2522	9.2	22.2141	19.8592	18,149	2652	9.0	8.5640	24.6216	19,372	2771	9.0	10.3363	25.1868
15,900	2524	8.3	23.1360	14.7356	17,294	2654	8.6	8.9562	3.2813	19,224	2773	9.0	10.4874	22.0635
15,659	2525	9.0	23.4828	7.2433	17,750	2655	8.7	9.4701	14.9864	18,263	2774	9.2	10.4656	0.6619
15,662	2531	9.2	25.1852	7.3501	17,713	2662	8.8	10.3612	13.8045	..	2775	9.1	10.5346	0.2850
<b>R.A. 6<sup>h</sup> 52<sup>m</sup></b>					17,618	2664	8.7	11.0983	11.7196	19,373	2776	8.9	10.8216	25.5799
16,758	2524	8.3	0.4610	14.7494	17,876	2671	8.9	12.5637	17.7579	18,727	2779	8.8	11.0200	11.9607
16,456	2525	9.0	0.7226	7.2532	17,716	2672	8.6	12.7368	14.2720	19,176	2781	8.8	11.6915	21.7679
16,459	2531	9.2	2.4262	7.3411	17,239	2676	8.8	13.2130	1.9304	19,376	2782	8.9	11.9024	25.1942
16,589	2534	8.8	3.8014	11.5724	17,669	2677	8.6	14.0552	12.9600	18,441	2783	8.0	12.2832	4.7874
16,759	2535	8.7	3.8468	15.4856	18,028	2680	8.6	14.7460	20.9139	19,022	2785	8.9	12.4654	18.4399
16,889	2536	8.6	4.3170	18.5685	18,077	2682	8.8	14.8277	22.7718	18,294	2786	9.3	12.4722	1.5130
16,627	2537	6.0	4.3311	11.9364	18,199	2683	7.0	15.1356	25.6229	18,827	2787	8.7	12.4855	14.2271
16,590	2538	6.3	4.4405	10.7469	17,760	2684	9.0	15.1961	15.0359	18,684	2799	8.9	15.0497	11.8411
16,523	2539	8.9	4.4437	8.7256	18,029	2688	9.0	15.5831	21.4375	19,384	2801	9.2	15.6832	25.7471
16,804	2540	8.6	4.5783	16.1453	17,801	2690	9.1	16.5388	16.0815	18,532	2803	9.2	16.2771	7.5585
16,400	2541	8.6	4.7240	4.8834	17,329	2691	8.9	16.7444	5.3524	18,534	2807	8.9	16.5522	6.6999
16,966	2544	9.3	5.1626	20.5249	17,939	2692	8.5	16.7677	19.0961	19,295	2810	9.2	17.0663	23.1386
16,431	2547	8.7	6.2806	6.2950	17,576	2693	8.9	16.8288	10.5774	18,306	2811	8.9	17.4871	2.3947
16,352	2549	9.0	6.5759	2.9415	17,443	2695	9.3	17.0622	7.7586	19,296	2815	9.3	17.6395	23.4338
16,857	2552	8.8	7.4072	17.0871	17,444	2696	8.9	17.1365	7.8450	18,571	2816	9.1	17.9058	7.6431
16,726	2554	8.9	8.3316	14.6832	17,446	2698	8.6	17.8440	7.6976	18,691	2817	8.8	17.9617	10.7141
16,895	2557	8.7	9.1490	18.1807	17,678	2701	8.5	18.7745	12.6486	18,692	2818	8.2	18.0369	10.7472
17,145	2562	5.6	10.9917	25.1096	17,943	2702	9.0	19.2239	18.9379	18,694	2820	9.2	18.4396	10.7663
16,407	2565	8.6	11.4127	4.9743	17,945	2707	8.8	19.7620	19.0129	18,407	2821	8.5	18.4970	4.1644
					17,539	2710	8.6	20.4164	10.4673	19,240	2826	7.6	19.1624	22.8299



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.
R.A. 7 <sup>h</sup> 8 <sup>m</sup> (continued)					R.A. 7 <sup>h</sup> 24 <sup>m</sup> (continued)					R.A. 7 <sup>h</sup> 32 <sup>m</sup> (continued)				
19,244	2831	9.0	19.8208	22.6407	21,366	2960	7.0	2.8966	10.8170	22,788	3090	8.2	11.6425	8.5040
18,647	2833	9.2	20.3287	10.2560	21,682	2962	9.2	3.5437	16.2871	23,554	3091	8.8	12.1897	25.6443
19,247	2834	8.9	20.5036	22.8611	21,230	2963	9.0	3.5865	8.8244	23,342	3096	8.8	13.1097	20.7020
19,346	2841	8.3	22.1138	24.4613	22,104	2966	9.0	3.8257	21.7460	22,748	3097	9.0	13.2214	7.8634
18,616	2842	9.0	22.2216	9.5622	21,688	2970	7.6	4.9895	15.8966	23,289	3098	6.4	13.8169	18.7557
18,578	2843	9.2	22.3316	8.4036	20,809	2974	8.2	6.0283	0.2790	22,837	3099	8.7	14.1161	9.7563
18,619	2844	9.0	22.9125	8.9241	20,897	2975	8.3	6.2068	2.9730	22,749	3100	9.1	14.3353	7.7340
18,797	2855	8.8	24.5746	13.5214	..	2976	8.0	6.3683	0.0751	23,434	3104	8.9	15.0089	22.2008
19,089	2856	9.2	25.0307	19.3385	21,177	2981	9.0	7.4899	7.6956	23,562	3106	8.5	15.3317	25.8657
18,623	2858	9.5	25.5948	8.7272	22,111	2982	8.6	7.7794	22.6017	22,752	3107	9.1	15.4607	8.0387
					21,313	2989	8.9	9.6183	10.1948	22,582	3109	8.7	15.6842	3.8929
					22,119	2990	8.5	9.8387	22.5609	23,356	3115	8.9	19.6495	20.3751
					21,013	2993	7.5	10.5610	4.4703	23,484	3117	9.0	20.2242	22.8430
					21,014	2994	8.2	10.6741	4.5342	23,579	3119	8.2	20.2619	25.5201
					22,242	2996	8.8	11.0694	24.3561	22,728	3121	7.4	20.6279	6.4130
					22,328	2997	8.6	11.4615	25.0612	22,478	3123	9.1	21.3154	1.2296
					22,329	2999	8.4	11.5515	24.7466	23,583	3124	9.0	22.5384	25.2462
					21,451	3002	7.7	12.0975	11.9742	23,258	3125	8.9	22.8768	18.1341
					22,009	3010	9.2	14.7162	20.5223	22,898	3127	9.0	23.0803	10.9765
					22,263	3011	8.9	14.7143	24.4688	23,260	3128	9.6	23.4834	18.6631
					21,262	3012	7.4	14.9265	9.0295	23,262	3130	6.1	23.8183	18.1983
					21,654	3016	8.8	16.0129	14.8816	22,643	3131	9.0	24.0584	4.9515
					20,978	3019	8.9	16.2728	4.0997	22,766	3132	8.6	24.1726	8.2228
					21,789	3022	8.7	16.4993	16.8172	23,490	3133	9.2	24.3142	23.8065
					21,792	3025	7.1	17.6502	16.8273	R.A. 7 <sup>h</sup> 40 <sup>m</sup>				
					20,980	3027	8.6	18.3245	3.6849	24,032	3127	9.0	0.3625	10.9909
					20,872	3031	9.0	19.8672	1.6332	24,367	3128	9.6	0.8530	18.6728
					21,340	3033	8.4	20.2807	9.6493	24,331	3130	6.1	1.1827	18.2042
					21,543	3036	9.0	21.3927	12.5899	23,809	3131	9.0	1.2722	4.9551
					21,805	3039	7.7	21.7977	16.6165	23,928	3132	8.6	1.4236	8.2250
					21,806	3044	8.9	23.0883	16.6046	24,517	3133	9.2	1.7423	23.8061
					21,045	3047	8.0	23.9292	4.6796	24,129	3143	8.7	3.8258	12.5538
					21,288	3048	9.1	24.2196	8.9602	24,002	3144	8.7	3.9147	10.1491
					20,877	2049	7.9	24.2853	1.4818	24,088	3149	8.8	4.4107	12.1853
					21,218	3050	9.2	24.3906	7.3832	23,739	3154	9.0	5.7696	2.9621
					21,554	3052	8.8	24.7273	12.5606	24,522	3156	9.2	6.4043	24.8073
					21,555	3053	9.5	24.8359	13.0024	23,662	3157	8.7	6.3480	0.6899
					20,878	3055	8.7	25.3835	1.5055	24,133	3158	8.7	6.5008	12.8646
					21,048	3056	8.3	25.4924	4.7869	24,050	3161	8.1	7.0933	11.4504
					21,811	3061	9.1	25.7056	17.0742	24,217	3162	8.7	7.5640	15.2095
					R.A. 7 <sup>h</sup> 32 <sup>m</sup>					23,748	3165	9.0	8.4371	3.1230
					23,095	3044	8.9	0.4345	16.6189	23,850	3166	9.2	8.4870	6.2911
					22,600	3047	8.0	1.1400	4.6847	24,448	3178	8.7	10.9844	21.1651
					22,771	3048	9.1	1.4790	8.9619	23,972	3181	8.6	11.4066	9.2250
					22,486	3049	7.9	1.4597	1.4833	23,862	3182	8.8	11.6522	5.3908
					22,697	3050	9.2	1.6321	7.3830	24,413	3184	9.0	12.5690	20.3987
					22,948	3052	8.8	2.0276	12.5563	24,144	3185	9.0	13.3455	13.2430
					22,949	3053	9.5	2.1411	12.9968	24,350	3190	8.7	14.6993	18.2551
					22,487	3055	8.7	2.5580	1.4951	23,682	3192	9.1	15.3878	0.7828
					22,605	3056	8.3	2.7042	4.7748	23,908	3195	8.8	15.4555	6.4586
					23,150	3061	9.1	3.0570	17.0583	24,064	3198	9.0	15.7855	10.6339
					23,055	3065	6.5	4.2728	15.3561	23,791	3200	8.6	16.6284	3.3515
					22,866	3068	9.0	4.9613	11.3704	24,583	3201	9.1	16.7065	25.8752
					23,504	3071	7.7	6.9105	24.0487	23,984	3202	8.1	17.2906	8.9362
					22,828	3077	8.8	8.7301	10.1611	24,110	3203	9.2	17.3230	12.1166
					23,230	3078	8.9	9.0284	18.4952	23,794	3213	8.9	18.4777	4.0972
					23,276	3080	9.0	9.4435	19.1201	24,149	3217	8.9	19.4916	13.4619
					22,782	3081	8.6	9.6654	9.2126	24,237	3222	9.0	21.1975	14.8739
					23,336	3082	9.0	10.2340	20.2439	24,456	3223	8.6	21.2231	21.2539
					23,339	3088	8.7	11.3641	19.7412	24,200	3226	9.4	21.5503	14.5614
					23,063	3089	8.8	11.4953	15.0503	24,487	3229	8.6	22.5080	21.8714
R.A. 7 <sup>h</sup> 24 <sup>m</sup>														
22,291	2950	8.3	0.3427	25.0206										
20,887	2953	8.0	1.1926	2.8848										
21,365	2957	9.0	2.5754	10.9423										



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
<b>R.A. 7<sup>h</sup> 40<sup>m</sup> (continued)</b>					<b>R.A. 7<sup>h</sup> 56<sup>m</sup> (continued)</b>					<b>R.A. 8<sup>h</sup> 4<sup>m</sup> (continued)</b>				
24,324	3230	9.0	22.6097	16.7933	26,274	3336	8.6	6.7910	17.8206	27,537	3478	9.2	16.7536	24.5635
24,239	3231	8.6	23.0870	14.8924	26,176	3339	8.0	6.9974	15.8919	27,268	3481	9.3	17.0528	17.5095
23,954	3235	9.1	23.4092	7.6220	26,127	3342	8.6	7.7453	15.0183	26,718	3482	9.0	17.1111	1.2471
24,202	3236	8.5	23.5116	14.0268	25,720	3343	9.0	7.7806	5.7263	27,424	3486	8.7	18.5779	21.6899
23,989	3237	9.3	23.6944	8.7387	26,094	3347	8.2	9.1721	13.7540	27,274	3491	9.0	19.3973	17.1962
24,154	3239	9.0	24.3526	13.5686	26,590	3349	8.4	9.4406	25.9532	26,748	3494	8.6	20.2541	1.6825
24,594	3240	8.6	24.3677	24.9716	26,131	3350	9.0	9.6799	15.3167	26,958	3495	8.1	20.3266	9.1418
24,121	3243	7.5	25.2039	12.1399	26,132	3352	7.4	9.9231	15.3284	27,569	3498	8.3	21.7542	24.9815
<b>R.A. 7<sup>h</sup> 48<sup>m</sup></b>					26,284	3357	8.9	10.7435	18.8342	27,148	3507	8.8	24.2672	13.8769
25,129	3231	8.6	0.4138	14.9067	25,631	3359	5.1	11.2501	2.4965	27,430	3510	8.7	24.9164	21.8906
24,866	3235	9.1	0.6534	7.6327	26,288	3365	9.0	12.4729	18.5122	<b>R.A. 8<sup>h</sup> 12<sup>m</sup></b>				
25,095	3236	8.5	0.8285	14.0363	26,464	3366	8.8	13.0372	22.6166	27,970	3507	8.8	1.5824	13.8778
24,913	3237	9.3	0.9513	8.7463	26,555	3368	8.7	14.0441	24.2573	28,228	3510	8.7	2.3227	21.8832
25,063	3239	9.0	1.6644	13.5686	26,141	3369	8.6	14.3301	15.4627	28,003	3512	8.3	3.4195	14.9002
25,455	3240	8.6	1.8090	24.9706	25,985	3370	8.6	14.8364	11.2928	28,004	3513	8.2	3.7487	14.8884
25,028	3243	7.5	2.4993	12.1302	25,699	3374	7.9	16.1322	5.3670	27,843	3515	8.9	4.0038	9.6369
25,177	3246	6.7	5.2502	16.0580	25,671	3378	9.0	17.1582	3.7567	27,768	3518	8.4	4.6360	7.6873
25,431	3247	8.7	5.2825	23.7663	26,243	3381	9.1	17.5826	17.4852	28,060	3523	9.0	5.6673	17.2825
24,958	3248	8.8	5.3842	10.0726	25,737	3382	9.1	17.6744	5.8198	27,813	3525	8.7	6.0460	9.0732
24,923	3249	9.0	5.4993	9.2001	26,107	3383	9.8	17.7000	14.4945	28,066	3527	8.6	7.1188	16.8656
25,460	3250	6.8	5.5644	24.4364	26,144	3384	9.1	17.8654	15.2493	27,847	3529	9.0	8.3464	9.4953
25,181	3252	6.5	6.4094	16.2633	26,613	3385	7.8	18.8304	25.4783	28,333	3530	8.9	8.4134	25.5383
25,182	3255	9.1	6.9727	16.7874	25,705	3393	8.1	21.0746	4.6756	27,979	3531	9.0	9.0648	14.0256
24,929	3257	8.6	7.7813	9.2624	26,074	3397	9.0	22.6566	12.9463	27,776	3536	8.7	10.7175	7.9705
24,930	3259	9.3	8.4374	8.8908	26,111	3399	9.1	23.2685	14.0495	28,099	3537	9.0	10.7309	17.7041
24,931	3260	9.3	8.4435	8.8714	26,351	3404	8.6	24.3796	18.9522	28,238	3538	8.2	11.4587	22.0404
25,227	3263	9.0	8.7239	17.6474	25,906	3405	7.6	24.5320	9.4341	27,985	3539	7.5	11.6303	14.2127
24,656	3264	7.2	9.1046	0.9184	26,353	3407	9.0	24.7662	18.9538	28,212	3541	8.2	12.9506	21.6841
25,142	3265	9.1	9.1358	15.3035	26,302	3408	6.2	25.0271	18.3699	27,854	3542	9.8	13.0223	9.8717
25,106	3270	9.0	10.4592	13.9563	26,493	3412	9.1	25.6916	22.6020	27,826	3543	8.8	13.0687	9.1320
25,231	3271	9.0	10.8922	17.6615	<b>R.A. 8<sup>h</sup> 4<sup>m</sup></b>					27,675	3544	9.1	13.2032	4.2703
25,107	3272	9.0	10.9209	13.9584	27,114	3399	9.1	0.5857	14.0617	28,339	3545	8.8	13.2034	25.7702
24,683	3273	8.2	10.9728	2.2178	27,330	3404	8.6	1.7525	18.9514	28,173	3547	8.4	13.9321	20.3822
24,657	3274	8.8	11.0690	1.4055	26,938	3405	7.6	1.7968	9.4322	27,883	3549	8.8	14.0783	11.2950
25,006	3279	9.0	11.6833	11.5311	27,332	3407	9.0	2.1391	18.9485	27,751	3557	9.1	15.9688	6.7387
25,310	3283	8.8	13.6550	19.3526	27,287	3408	6.2	2.3934	18.3617	27,831	3558	8.1	16.1074	8.7543
25,241	3284	8.8	13.7546	17.7552	27,436	3412	9.1	3.1058	22.5856	27,887	3560	9.0	16.3893	10.7579
25,155	3289	9.1	14.7989	14.9918	27,118	3414	8.7	3.8267	14.3872	27,697	3561	8.7	16.7625	5.0413
25,242	3290	9.1	14.9292	17.5243	26,729	3416	9.0	4.0111	1.8516	27,657	3565	9.0	17.2855	2.6289
25,243	3292	9.2	15.0883	16.9639	26,759	3419	8.6	4.2841	2.6320	28,290	3566	9.0	17.6655	23.5712
25,415	3293	8.9	15.1929	22.6835	26,707	3421	8.5	5.5401	1.3128	28,319	3568	8.7	18.3758	24.5340
25,115	3295	9.0	15.6710	14.4648	26,708	3423	9.1	5.6287	0.5644	28,321	3569	8.7	18.4652	24.6966
25,200	3297	8.9	16.5442	16.2596	27,369	3425	7.8	6.0638	20.2967	28,218	3570	8.9	18.8423	20.7955
24,692	3302	6.2	17.6909	1.8403	26,972	3426	9.5	6.3261	9.6866	27,859	3572	9.2	19.1682	9.4810
25,292	3304	8.7	18.1689	18.0349	26,973	3428	8.7	6.3925	10.2721	27,860	3580	9.1	20.4926	9.8375
24,667	3306	8.8	19.1790	0.9056	26,735	3431	7.8	6.7152	2.0371	28,352	3582	9.2	20.7601	25.1129
24,985	3311	6.5	21.6258	10.4167	27,341	3433	8.2	7.4055	19.4696	27,662	3583	8.4	20.9023	2.8593
25,018	3313	9.1	21.9830	11.0063	27,550	3436	8.8	7.6349	25.5693	28,297	3585	7.5	21.2436	23.2258
25,510	3319	9.2	24.1308	25.3879	27,442	3437	9.4	7.7531	22.8191	28,251	3590	8.8	22.2978	22.7309
24,909	3323	9.1	25.0242	8.6504	27,051	3452	8.9	10.8025	11.6442	28,328	3592	8.9	23.3187	24.4929
<b>R.A. 7<sup>h</sup> 56<sup>m</sup></b>					27,021	3454	8.5	11.0772	11.4652	28,114	3593	9.1	23.5156	18.1907
26,578	3319	9.2	1.5769	25.3896	27,350	3459	7.4	13.1503	19.8265	28,254	3594	8.7	24.1453	22.3017
25,864	3323	9.1	2.2800	8.6432	27,096	3461	9.0	13.1886	13.2400	27,938	3599	8.3	25.1970	12.5712
26,317	3328	8.8	4.3269	19.6539	26,740	3463	8.8	13.4601	2.2476	27,866	3601	9.0	25.7187	10.2767
25,965	3329	8.1	5.0228	11.4868	27,351	3465	8.2	13.5230	19.5750	27,804	3602	9.0	25.7324	8.2720
26,582	3330	8.9	5.1173	25.4949	27,558	3467	7.0	13.8558	25.8561	<b>R.A. 8<sup>h</sup> 20<sup>m</sup></b>				
26,047	3333	8.2	6.0928	13.0139	27,307	3468	9.0	14.0148	18.0077	28,954	3592	8.9	0.7546	24.5043
26,370	3335	8.6	6.7799	20.7774	27,063	3470	5.3	14.5965	12.4294	28,805	3593	9.1	0.8798	18.2001
					26,742	3475	9.1	16.3842	1.9865	28,903	3594	8.7	1.5563	22.3035
					27,535	3476	8.5	16.4383	24.2471					
					27,481	3477	9.0	16.6756	23.2703					



Reference No. Mag. Standard co-ordinates, 1900-0.					Reference No. Mag. Standard co-ordinates, 1900-0.					Reference No. Mag. Standard co-ordinates, 1900-0.				
Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.	
<b>R.A. 8<sup>h</sup> 20<sup>m</sup> (continued)</b>					<b>R.A. 8<sup>h</sup> 28<sup>m</sup> (continued)</b>					<b>R.A. 8<sup>h</sup> 44<sup>m</sup> (continued)</b>				
28,687	3599	8.3	2.4973	12.5615	29,435	3749	9.0	15.7977	18.1544	30,458	3864	8.4	1.3505	9.6732
28,597	3601	9.0	2.9928	10.2614	29,405	3750	8.9	15.8025	17.7611	30,581	3865	9.2	1.5477	17.1218
28,545	3602	9.0	2.9837	8.2568	29,161	3751	9.1	16.6845	6.1981	30,563	3867	9.4	2.0064	15.8380
28,710	3604	9.1	3.6452	13.9687	29,081	3752	9.2	16.8958	2.1671	30,582	3871	9.1	3.8175	16.5978
28,712	3606	9.0	4.0897	13.9300	29,514	3753	8.7	17.1770	21.6982	30,663	3872	8.8	4.0088	23.0915
28,760	3607	8.5	4.1374	15.8392	29,353	3757	8.9	18.2138	15.6699	30,369	3874	9.1	4.1144	2.9549
28,907	3608	6.0	4.2338	22.1516	29,205	3761	8.7	19.2292	8.4752	30,564	3875	9.4	4.7489	15.6029
28,931	3610	9.0	4.8068	23.5734	29,162	3762	8.9	19.2990	6.4611	30,470	3882	8.7	6.4879	10.4945
28,416	3611	9.2	4.7439	1.4263	29,186	3763	8.9	19.3281	6.6929	30,686	3883	8.1	6.8326	25.7689
28,911	3615	8.9	5.7787	22.2159	29,163	3764	8.8	19.4746	5.8367	30,612	3884	9.1	7.0490	18.7855
28,879	3617	9.2	6.5097	21.1027	29,164	3767	8.8	19.9214	6.1777	30,404	3888	6.5	7.8773	5.7037
28,553	3619	9.1	6.7662	7.7298	29,206	3769	9.0	19.9605	8.3022	30,628	3889	9.2	7.9621	19.6805
28,814	3622	9.0	7.5796	18.5260	29,225	3775	8.9	20.9415	9.3705	30,677	3893	8.4	9.1767	24.4909
28,500	3628	8.9	8.9398	5.7220	29,443	3776	9.1	21.4532	18.2821	30,419	3894	8.6	9.3977	6.5262
28,501	3629	8.8	9.4719	5.5800	29,615	3777	8.6	21.4693	25.1201	30,397	3896	8.6	10.1812	5.1179
28,576	3630	8.3	9.5956	8.5448	29,241	3778	9.1	22.1451	9.7026	30,594	3899	8.4	10.9962	17.9744
28,915	3633	9.5	10.1980	21.7785	29,166	3780	8.9	22.6994	5.9719	30,453	3903	8.2	12.4097	8.8968
28,817	3634	9.1	10.3250	18.1802	29,522	3782	8.7	22.8098	21.8523	30,512	3907	8.9	13.1059	13.4587
28,695	3635	8.8	10.4415	13.0693	29,167	3783	9.0	23.0880	5.5813	30,422	3914	9.0	15.7591	6.7857
28,456	3639	9.1	11.3674	4.0599	29,525	3788	8.9	24.6025	21.2147	30,476	3917	8.7	16.5572	11.3455
28,481	3640	9.0	11.4103	4.3492	29,144	3790	7.5	25.6025	5.0206	30,477	3919	8.8	16.8174	11.1267
28,639	3644	7.3	12.0018	10.7293	<b>R.A. 8<sup>h</sup> 36<sup>m</sup></b>					30,600	3923	9.2	18.4991	18.0111
28,885	3647	9.5	13.0188	21.2144	29,778	3783	9.0	0.3090	5.5956	30,356	3924	9.2	19.2692	1.0929
28,505	3649	8.7	14.2842	6.1149	30,191	3788	8.9	2.0012	21.2111	30,390	3937	8.3	23.5564	3.8990
28,647	3659	8.6	16.8540	11.0280	29,752	3790	7.5	2.8169	5.0073	30,555	3939	8.7	23.9305	14.7651
28,890	3660	9.0	16.8807	20.8823	29,703	3793	9.2	4.3557	2.2616	<b>R.A. 8<sup>h</sup> 52<sup>m</sup></b>				
28,698	3662	9.1	17.2290	12.9421	29,676	3795	9.0	5.4721	1.6827	30,775	3937	8.3	0.7582	3.9081
28,772	3664	8.5	17.5115	16.4033	30,271	3796	7.9	5.7642	24.5666	30,909	3939	8.7	1.2559	14.7699
28,700	3669	9.1	18.7796	12.8466	30,318	3799	9.0	6.5956	25.9723	31,008	3950	9.4	5.4472	21.1802
28,654	3674	9.2	19.3031	11.0309	30,098	3800	8.9	6.7704	17.1407	31,073	3951	7.6	5.7380	25.6181
28,534	3675	8.4	19.3159	7.1149	30,065	3803	9.0	6.8316	16.0037	31,009	3952	9.2	6.0959	20.9780
28,511	3676	9.0	19.6485	5.7628	29,681	3806	8.7	7.5805	2.0697	30,804	3953	8.3	6.6196	6.8115
28,590	3677	9.2	19.9102	8.5907	30,117	3807	7.1	7.7975	17.6340	31,029	3957	9.2	8.3062	22.3183
28,952	3687	8.8	22.7354	23.3976	30,227	3809	9.0	8.3754	12.1291	30,866	3958	8.7	8.4533	11.8925
28,738	3692	9.0	24.1302	14.3763	30,162	3811	9.1	9.1898	20.5741	30,986	3959	9.3	8.5280	20.5066
<b>R.A. 8<sup>h</sup> 28<sup>m</sup></b>					30,322	3813	9.2	9.7872	25.9302	30,794	3960	7.9	8.5233	6.1839
29,314	3692	9.0	1.4511	14.3786	29,818	3814	8.6	9.9098	7.0259	30,824	3962	9.0	9.9801	8.3965
29,568	3698	9.2	3.1496	24.0112	29,687	3820	8.6	10.7939	2.0842	30,966	3969	8.9	11.4698	18.0764
29,175	3700	9.2	3.6702	6.6602	29,740	3823	9.1	11.8879	4.1491	30,903	3972	9.1	12.7964	14.4187
29,146	3703	7.8	4.4776	6.1056	29,957	3827	9.0	12.7460	12.3323	30,937	3973	9.1	13.0666	15.9330
29,528	3706	8.8	5.2985	22.2960	30,016	3828	8.6	12.9589	14.0913	30,904	3974	8.2	13.5443	14.1071
29,571	3709	8.1	6.9972	24.3969	29,924	3829	8.7	12.9981	11.1193	31,033	3975	9.1	13.7190	22.2896
29,320	3710	8.5	6.9789	14.1634	29,743	3833	9.0	13.7172	3.7786	30,941	3977	9.0	15.7298	16.3719
29,283	3715	8.7	7.9369	13.3001	30,172	3836	8.3	14.7909	19.7224	30,845	3978	8.7	16.0245	10.0333
29,573	3716	8.1	9.0664	24.6132	29,929	3837	8.7	15.2769	10.8223	30,942	3980	9.2	16.3396	16.0838
29,075	3717	8.7	9.3547	2.1520	30,018	3838	8.0	15.3681	14.1744	30,808	3981	7.8	16.6208	7.0303
29,115	3718	9.0	9.3761	3.4805	30,175	3840	8.8	16.1634	20.6179	31,063	3985	8.9	19.4186	24.7794
29,097	3719	9.0	9.4582	2.8853	30,022	3846	9.3	18.9831	13.5747	31,094	3987	8.0	19.8839	25.9971
29,153	3720	8.3	9.4722	6.5201	30,211	3854	9.0	21.0650	21.6645	30,858	3990	6.8	21.77959	10.8090
29,349	3721	7.6	9.8881	15.0181	30,080	3855	9.1	21.2067	15.6144	30,875	3995	8.1	24.0551	11.8005
29,599	3722	9.0	10.1468	25.1121	30,264	3857	9.1	21.6596	13.7296	31,049	3997	8.8	24.4015	22.9278
29,373	3723	6.0	10.2294	15.8759	30,084	3859	9.1	23.3330	16.2814	<b>R.A. 9<sup>h</sup> 0<sup>m</sup></b>				
29,551	3727	9.1	11.2522	23.7750	30,295	3861	7.5	23.7409	23.8899	31,203	3995	8.1	1.3468	11.8039
29,078	3728	7.1	11.4343	1.5778	29,910	3864	8.4	24.0830	9.6700	31,327	3997	8.8	1.8196	22.9265
29,255	3731	9.1	12.0347	11.2069	30,112	3865	9.2	24.1956	17.1203	31,205	4000	8.7	3.3234	12.4211
29,394	3732	8.8	12.0564	17.1252	30,087	3867	9.4	24.6689	15.8419	31,261	4001	8.9	3.8119	16.8123
29,479	3734	8.7	12.3458	20.5307	<b>R.A. 8<sup>h</sup> 44<sup>m</sup></b>					31,111	4004	9.2	4.9491	2.3030
29,120	3738	8.9	13.4479	3.8006	30,559	3859	9.1	0.6756	16.2928	31,299	4005	8.9	5.6233	20.8038
29,577	3739	9.1	13.6906	24.3081	30,674	3861	7.5	1.1699	23.8966					
29,238	3741	9.1	14.1121	10.0700										
29,181	3747	9.0	15.2708	7.0914										



Reference No.					Reference No.					Reference No.				
Mag.		Standard co-ordinates, 1900-0.			Mag.		Standard co-ordinates, 1900-0.			Mag.		Standard co-ordinates, 1900-0.		
Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.	
<b>R.A. 9<sup>h</sup> 0<sup>m</sup> (continued)</b>					<b>R.A. 9<sup>h</sup> 16<sup>m</sup> (continued)</b>					<b>R.A. 9<sup>h</sup> 32<sup>m</sup> (continued)</b>				
31,112	4007	9.2	5.8584	1.6133	32,111	4124	8.7	3.4000	25.1459	32,723	4279	9.0	7.8564	12.3193
31,300	4008	8.8	6.7880	20.3571	32,097	4126	9.1	3.4481	24.0842	32,738	4282	8.5	9.3981	14.3449
31,142	4015	9.1	9.0944	6.1318	31,960	4129	8.4	4.5574	14.6646	32,746	4287	6.5	9.9201	14.6297
31,131	4016	9.2	9.1918	5.2341	31,979	4133	8.9	5.4139	15.6332	32,622	4292	8.3	11.8489	3.2929
31,143	4017	9.1	9.7366	5.8226	31,906	4134	9.0	5.9146	10.9078	32,819	4293	8.9	11.9809	24.3413
31,277	4022	8.6	10.8328	18.1390	31,949	4138	8.9	6.4437	13.6198	32,677	4299	8.9	13.0583	7.5652
31,120	4023	8.8	11.4058	2.7750	32,098	4139	8.7	6.6562	24.3549	32,682	4304	7.7	16.7940	7.7261
31,310	4028	8.3	12.9468	21.0327	32,099	4140	8.3	6.8651	24.4037	32,626	4305	9.2	16.9505	3.1364
31,206	4031	8.7	14.1049	12.0813	32,117	4144	9.2	8.8824	25.1847	32,664	4308	8.2	17.5902	7.3904
31,227	4034	9.0	14.8034	13.7288	32,087	4146	9.2	9.1493	23.2083	32,748	4309	8.5	17.5871	15.1376
31,344	4035	9.1	15.1933	24.8107	31,822	4149	8.2	11.4021	2.3928	32,637	4310	9.2	17.6796	3.6060
31,122	4038	8.8	16.8194	2.5996	31,863	4152	8.8	12.0276	7.2810	32,740	4322	8.5	21.8914	14.2376
31,207	4040	8.6	17.3072	12.1969	31,953	4154	8.9	12.2553	13.9984	32,667	4323	8.9	22.0516	6.8181
31,313	4041	8.5	17.5550	21.4899	32,090	4156	9.1	12.9422	23.2980	32,766	4324	9.0	22.6927	17.3893
31,197	4042	8.5	18.3399	11.5931	32,072	4158	9.1	14.2622	22.0216	32,617	4328	8.6	24.1706	1.7589
31,346	4050	8.5	20.8967	24.3367	31,866	4159	8.7	15.3512	7.2339	32,618	4329	8.5	24.2301	1.4041
31,137	4051	9.0	21.5496	4.6288	31,942	4176	8.6	20.5792	12.9991	<b>R.A. 9<sup>h</sup> 40<sup>m</sup></b>				
31,270	4054	8.8	22.8683	17.2669	31,930	4183	9.2	22.2131	11.8104	32,858	4328	8.6	1.3481	1.7615
31,222	4060	9.0	24.2622	13.7562	31,814	4184	8.8	23.4758	1.3019	32,859	4329	8.5	1.4036	1.4062
<b>R.A. 9<sup>h</sup> 8<sup>m</sup></b>					32,066	4185	8.6	23.5671	21.4578	33,068	4338	8.6	4.8108	23.7437
31,569	4060	9.0	1.5761	13.7571	31,972	4189	9.0	24.4068	14.9345	33,044	4339	9.0	5.1083	21.5826
31,686	4063	9.0	3.1610	21.3813	<b>R.A. 9<sup>h</sup> 24<sup>m</sup></b>					32,885	4342	8.9	6.4573	4.9087
31,559	4064	8.0	3.1523	13.2180	32,163	4184	8.8	0.6482	1.3119	33,088	4343	8.3	6.6061	25.2809
31,440	4067	9.0	3.6656	4.7572	32,472	4185	8.6	0.9685	21.4664	32,879	4345	8.9	7.5412	3.3852
31,492	4068	8.6	4.8480	8.6373	32,372	4189	9.0	1.7340	14.9337	32,973	4351	8.6	8.4736	13.7912
31,428	4070	8.1	5.2060	3.9318	32,513	4195	8.8	5.4006	24.3770	33,082	4355	7.0	9.7698	23.8993
31,616	4071	8.2	5.3116	17.0315	32,476	4198	8.0	6.1014	20.9424	32,975	4359	8.3	11.3068	13.8574
31,657	4075	8.7	6.4683	19.0919	32,185	4204	8.8	7.4833	3.0482	33,030	4361	9.0	12.7153	18.7925
31,687	4076	9.3	6.4872	21.2611	32,298	4206	7.1	7.8127	9.6693	32,964	4366	8.5	13.3735	12.9130
31,576	4082	8.5	8.5192	13.8994	32,247	4207	9.0	7.8980	6.7242	33,073	4371	8.7	14.9342	23.5612
31,676	4083	9.4	10.2716	20.8383	32,393	4208	8.9	8.3620	15.9608	32,978	4372	8.4	15.7892	14.4520
31,660	4085	8.6	11.0813	19.5951	32,283	4212	9.0	9.4717	9.4683	32,997	4373	8.9	15.8905	15.9178
31,619	4086	6.1	11.2968	17.0661	32,384	4217	8.4	12.7912	14.7077	32,881	4374	8.3	16.1207	3.8765
31,548	4090	8.8	13.8385	12.2955	32,533	4219	8.3	14.0855	24.9755	33,084	4376	8.6	16.6818	24.7507
31,457	4092	8.9	14.2194	5.6911	32,304	4224	8.6	15.9613	9.5431	32,998	4378	7.7	17.0748	16.2065
31,414	4093	8.9	15.7761	2.3760	32,188	4225	9.0	15.9978	2.8518	33,090	4379	9.0	17.1633	24.8808
31,623	4094	8.7	16.0408	17.0491	32,519	4226	9.1	15.9822	24.3437	33,085	4384	8.9	19.5218	23.9815
31,707	4096	8.3	16.4333	22.7998	32,366	4229	9.0	16.7632	13.7573	32,907	4386	8.5	22.6040	6.4665
31,719	4097	8.7	16.4553	23.6830	32,205	4230	9.1	16.8551	3.5717	32,875	4387	9.1	22.7421	2.8377
31,663	4098	8.9	16.5073	19.8027	32,367	4232	8.4	17.5185	14.5339	33,034	4390	8.5	23.7815	18.9891
31,433	4103	7.0	17.9808	4.1468	32,414	4234	8.8	17.6970	17.3695	33,012	4392	9.2	24.4171	17.4244
31,681	4104	8.6	18.2575	20.0565	32,386	4236	8.6	18.0948	14.9535	32,950	4393	7.8	24.5976	11.2024
31,698	4106	8.3	19.9147	21.4779	32,523	4238	9.0	18.8540	24.1870	33,013	4394	9.2	24.5400	17.3838
31,596	4108	7.7	20.4721	15.1841	32,482	4245	8.9	22.4304	21.2642	32,991	4398	8.2	25.5215	15.2089
31,628	4109	9.1	20.5949	17.5431	32,483	4247	9.2	23.0349	21.1828	<b>R.A. 9<sup>h</sup> 48<sup>m</sup></b>				
31,417	4110	9.0	21.4636	1.6119	32,355	4250	8.7	23.3657	13.2576	33,340	4390	8.5	1.1548	18.9953
31,699	4111	8.8	21.5439	21.5361	32,341	4251	6.5	23.4797	12.5327	33,306	4392	9.2	1.7726	17.4233
31,583	4113	9.1	22.8201	14.4106	<b>R.A. 9<sup>h</sup> 32<sup>m</sup></b>					33,247	4393	7.8	1.8824	11.1997
31,556	4116	9.0	23.5077	12.0598	32,789	4247	9.2	0.4332	21.1978	33,307	4394	9.2	1.8950	17.3812
31,684	4117	9.1	23.5490	20.7835	32,729	4250	8.7	0.6739	13.2688	33,280	4398	8.2	2.8517	15.1953
31,566	4119	8.1	23.8390	13.5265	32,730	4251	6.5	0.7797	12.5426	33,370	4405	8.9	5.5024	22.7110
31,701	4120	8.8	25.1383	21.8683	32,649	4257	8.6	3.2980	6.3009	33,348	4409	8.5	7.7519	20.7524
<b>R.A. 9<sup>h</sup> 16<sup>m</sup></b>					32,737	4264	8.7	4.3154	13.6512	33,327	4411	9.2	7.9681	18.7030
31,918	4116	9.0	0.8023	12.0695	32,767	4267	8.5	5.2057	18.4354	33,361	4413	8.6	8.4034	21.0262
32,049	4117	9.1	0.9427	20.7924	32,671	4268	9.1	5.3994	7.6040	33,173	4414	7.9	8.5130	3.3019
31,931	4119	9.1	1.1503	13.5323	32,691	4269	8.6	5.7086	8.9310	33,283	4417	7.9	9.6672	15.3645
32,068	4120	8.8	2.5443	21.8583	32,672	4272	8.9	5.9482	8.0774	33,261	4419	9.0	10.0852	12.8709
					32,643	4274	8.3	6.5578	4.6987	33,349	4420	8.3	10.5572	19.8788



Reference No.      Mag.      Standard co-ordinates, 1900-0.					Reference No.      Mag.      Standard co-ordinates, 1900-0.					Reference No.      Mag.      Standard co-ordinates, 1900-0.				
Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.	
<b>R.A. 9h 48m (continued)</b>					<b>R.A. 10h 12m</b>					<b>R.A. 10h 28m (continued)</b>				
33,300	4421	8.7	10.5818	16.4842	34,170	4548	8.4	0.2689	13.7437	34,839	4670	9.0	7.2551	20.1045
33,240	4422	9.1	12.7741	9.5283	34,209	4549	9.0	0.9249	16.9966	34,691	4672	8.4	7.9109	6.1933
33,263	4427	8.2	15.4033	13.1661	34,127	4550	9.1	1.1487	11.3572	34,809	4675	9.1	8.5726	17.2674
33,317	4430	8.3	16.5391	17.2833	34,096	4551	6.7	1.3157	8.9003	34,722	4680	8.9	10.4673	8.4468
33,378	4431	8.5	17.6677	22.8347	34,184	4553	6.5	2.3930	15.3672	34,871	4681	8.9	10.7181	22.9897
33,205	4435	5.8	19.1253	7.4361	34,230	4554	9.1	3.1246	18.5975	34,787	4682	8.9	11.1450	14.6702
33,366	4438	9.2	20.7565	21.2337	34,024	4555	8.9	4.0740	2.3149	34,715	4683	8.6	11.7219	7.4430
33,345	4439	8.0	20.8469	19.0840	34,098	4556	8.7	4.3712	9.1689	34,723	4684	8.4	12.6992	9.2217
33,290	4440	7.6	21.5601	15.4553	34,065	4565	8.2	9.5547	6.2497	34,833	4685	9.1	13.2026	19.4002
33,337	4446	8.2	22.3257	18.7648	34,213	4566	8.8	9.8735	17.1205	34,854	4691	8.5	14.9706	20.9867
33,303	4447	8.2	22.9711	15.8786	34,044	4568	8.6	11.1243	3.6010	34,803	4695	9.1	17.8014	16.5342
33,178	4450	9.1	25.0053	3.2599	34,188	4569	9.1	11.5784	15.0055	34,877	4702	8.6	20.3397	23.5337
<b>R.A. 9h 56m</b>					34,136	4571	7.1	12.3492	10.7198	34,816	4708	8.5	24.2637	17.5105
33,607	4447	8.2	0.3091	15.8942	34,315	4576	8.8	13.2237	24.9345	34,707	4710	9.1	25.3378	6.5340
33,468	4450	9.1	2.1998	3.2532	34,165	4577	8.7	15.0679	12.9264	<b>R.A. 10h 36m</b>				
33,684	4456	8.8	6.5764	22.7902	34,299	4580	9.2	15.8136	24.5299	35,104	4708	8.5	1.6202	17.5112
33,672	4461	8.3	9.0473	21.3385	34,081	4581	9.2	16.2106	6.4684	34,996	4710	9.1	2.5694	6.5236
33,469	4463	8.0	10.1320	3.2279	34,316	4583	9.1	17.5984	24.9182	35,029	4713	8.8	3.6945	11.0657
33,673	4465	9.1	10.4954	21.3383	34,268	4586	8.3	19.2888	22.7298	35,163	4715	8.6	4.1043	22.3585
33,473	4468	9.3	11.9788	2.7793	34,058	4589	8.6	20.4313	4.4148	35,068	4718	9.1	6.6626	14.3755
33,598	4472	8.6	14.7505	15.3165	34,237	4590	9.1	20.5014	19.1877	35,195	4719	8.7	7.1890	25.6886
33,466	4473	8.4	15.2246	1.7025	34,317	4591	9.1	20.6410	25.0517	35,069	4720	8.7	7.3640	13.9710
33,614	4476	9.0	17.1593	16.4191	34,085	4599	9.0	23.4898	6.5376	35,008	4721	9.1	7.4706	8.2501
33,523	4479	8.8	17.6722	7.8096	34,095	4600	7.3	24.3527	7.6330	35,198	4722	9.2	8.7778	25.7104
33,714	4480	7.0	18.3600	24.2973	<b>R.A. 10h 20m</b>					34,977	4728	8.6	11.2341	4.2203
33,505	4485	8.7	22.0504	5.8266	34,409	4599	9.0	0.7216	6.5474	34,962	4729	9.0	12.0375	2.1583
33,643	4487	9.2	22.2762	18.0571	34,423	4600	7.3	1.5970	7.6333	35,071	4731	9.1	12.1957	13.8509
33,564	4488	9.0	23.1270	12.5058	34,627	4607	7.1	5.2621	25.8757	34,978	4732	9.1	12.6628	3.6334
33,565	4491	8.4	23.4821	12.1591	34,534	4610	6.3	5.7375	17.3603	35,166	4734	9.2	13.4230	22.3098
<b>R.A. 10h 4m</b>					34,461	4612	8.2	7.2510	12.1433	35,167	4735	9.1	13.5853	22.4547
33,836	4488	9.0	0.4266	12.5198	34,442	4613	9.1	7.8279	10.0823	35,212	4737	7.7	17.3212	25.9671
33,830	4491	8.4	0.7779	12.1690	34,515	4615	8.8	8.4194	15.6871	34,987	4744	8.7	20.4733	5.1238
33,962	4500	8.4	5.0637	25.7208	34,591	4617	8.4	9.8107	21.7835	35,011	4747	8.3	22.9131	8.4253
33,875	4501	9.1	5.2716	16.5766	34,546	4619	9.0	10.0399	17.9720	35,091	4751	8.9	25.6467	15.0574
33,820	4505	..	7.0045	10.8459	34,518	4621	9.0	11.1347	16.3006	<b>R.A. 10h 44m</b>				
33,821	4506	..	7.0221	10.8711	34,466	4622	9.0	11.2868	11.9400	35,344	4751	8.9	2.9752	15.0425
33,877	4508	8.6	8.0869	16.8075	34,558	4623	8.9	12.0147	18.6126	35,335	4753	8.5	4.6394	14.5073
33,865	4511	7.5	9.1205	15.6555	34,427	4625	8.3	12.4545	8.0203	35,361	4754	9.0	5.0058	17.0337
33,850	4515	8.6	11.2327	13.9088	34,537	4628	8.5	14.3398	16.5371	35,354	4757	7.3	6.2555	15.8235
33,958	4516	8.6	11.2974	25.4304	34,499	4630	7.0	15.2855	14.1020	35,272	4758	7.4	6.3552	5.1716
33,866	4518	7.8	11.9502	16.0720	34,599	4632	7.6	16.0028	22.8108	35,346	4759	9.0	6.8291	15.3434
33,781	4519	8.8	12.1462	4.1454	34,521	4633	9.1	16.5298	16.4019	35,364	4760	9.1	7.5875	17.2476
33,934	4522	8.9	12.9087	22.8920	34,613	4637	8.7	18.1822	24.3398	35,287	4762	9.2	8.3269	7.4070
33,897	4527	8.9	15.8859	18.7903	34,615	4639	8.8	20.7697	23.7544	35,398	4765	8.4	10.2765	22.7546
33,788	4529	8.1	16.4286	5.4798	34,616	4641	8.8	21.0025	24.3239	35,306	4767	8.6	11.5332	9.4242
33,767	4530	7.3	18.1246	2.3415	34,446	4644	9.2	21.2230	9.8109	35,339	4770	9.0	12.5979	14.1173
33,775	4531	8.7	18.5586	3.7162	34,432	4645	8.9	21.3771	7.8497	35,409	4771	9.1	13.2869	23.5868
33,898	4533	9.0	19.2883	18.5696	34,433	4646	8.8	21.7267	7.5688	35,399	4773	9.2	14.1683	22.4696
33,833	4535	9.0	19.5324	11.5429	34,481	4650	6.4	23.7822	13.1868	35,394	4777	8.8	17.3933	20.9674
33,929	4537	8.4	19.8870	21.8386	34,370	4658	9.0	25.5824	1.8517	35,378	4778	8.6	18.2681	19.0690
33,796	4538	6.4	20.2355	6.5545	<b>R.A. 10h 28m</b>					35,295	4779	9.3	19.5684	7.9255
33,894	4539	9.3	20.2768	18.3640	34,755	4650	6.4	1.0896	13.1933	35,281	4781	9.0	19.8154	6.2201
33,882	4544	9.0	22.1003	17.2219	34,658	4658	9.0	2.7609	1.8389	35,273	4785	8.6	22.9164	5.3517
33,851	4548	8.4	22.9554	13.7280	34,747	4659	8.9	3.3108	11.8734	35,259	4787	8.5	23.3874	2.3011
33,883	4549	9.0	23.5743	16.9878	34,686	4663	8.6	4.6787	6.1122	35,321	4789	9.9	23.5716	11.0804
33,835	4550	9.1	23.8621	11.3516	34,808	4667	8.8	6.0332	17.1877	35,332	4790	7.5	24.3673	13.4007
33,808	4551	6.7	24.0570	8.8967	34,860	4668	9.0	6.7800	22.7375					
33,861	4553	6.5	25.0608	15.3756										



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.
<b>R.A. 10<sup>h</sup> 52<sup>m</sup></b>					<b>R.A. 11<sup>h</sup> 8<sup>m</sup> (continued)</b>					<b>R.A. 11<sup>h</sup> 24<sup>m</sup> (continued)</b>				
35,461	4787	8.5	0.5711	2.3121	36,130	4905	9.0	2.4871	20.4736	36,559	5035	8.7	16.2174	20.9973
35,518	4789	9.9	0.8550	11.0893	36,132	4912	8.9	5.3675	19.9250	36,560	5037	9.3	16.7793	20.9518
35,539	4790	7.5	1.6771	13.4005	36,162	4913	8.9	5.6497	23.3460	36,542	5039	8.3	17.8698	17.1411
35,629	4793	9.1	3.1704	20.6154	35,964	4914	9.6	6.2533	2.3844	36,534	5042	8.4	18.2535	16.3673
35,613	4794	5.0	3.3857	20.2274	36,133	4918	8.8	9.1347	20.5595	36,562	5044	8.0	18.4727	20.7768
35,631	4795	8.7	3.6545	21.4918	35,965	4919	8.4	9.1582	2.3230	36,465	5049	8.9	21.3278	3.6098
35,502	4796	9.0	3.6665	8.3076	35,966	4921	9.5	9.4177	2.3255	36,544	5050	9.1	22.4592	17.3739
35,532	4797	9.0	4.0377	11.8167	36,134	4922	8.0	10.0503	20.2629	36,471	5052	8.2	23.3424	4.8471
35,505	4801	9.1	5.5656	8.9222	35,994	4927	8.9	12.0309	6.2860	36,536	5054	8.9	24.5436	16.1946
35,633	4802	8.4	6.1907	21.4332	35,967	4928	7.9	12.0804	2.5814	36,462	5055	8.8	24.7696	3.0040
35,521	4804	8.7	7.2974	10.5103	36,079	4929	8.3	12.1177	14.8209	36,587	5058	9.0	25.5672	24.4695
35,524	4810	8.7	9.6838	10.8507	36,184	4930	8.4	13.5799	25.0213	<b>R.A. 11<sup>h</sup> 32<sup>m</sup></b>				
35,542	4814	8.7	11.0464	12.8530	36,176	4932	8.7	14.8803	23.8792	36,679	5052	8.2	0.5551	4.8586
35,594	4815	9.1	11.4672	17.8227	36,102	4934	8.0	15.8395	17.5561	36,757	5054	8.9	1.8851	16.1922
35,636	4816	9.1	11.5517	21.7997	36,059	4935	9.0	16.1377	13.2811	36,663	5055	8.8	1.9613	3.0001
35,463	4817	8.9	12.2149	2.6183	36,060	4936	8.6	17.3701	12.8615	36,810	5058	9.0	3.0027	24.4541
35,618	4822	9.1	13.2915	20.6003	35,975	4939	8.5	18.6474	4.0428	36,820	5059	8.5	3.4189	24.9522
35,507	4825	9.0	15.1488	8.9384	36,072	4940	8.4	19.0473	13.7442	36,672	5063	9.0	4.5190	3.7754
35,568	4826	8.9	15.8096	15.4053	36,003	4942	9.5	19.1487	6.4460	36,794	5064	8.6	6.1835	21.9733
35,596	4828	9.1	16.4935	18.4983	36,073	4943	7.0	19.6260	14.1237	36,822	5067	7.9	7.8423	25.0646
35,526	4829	9.0	16.8319	10.9560	36,050	4944	9.0	20.0213	11.7759	36,811	5069	9.1	8.6235	24.5102
35,611	4831	8.7	18.5811	19.2185	36,103	4945	8.8	20.0272	16.7969	36,738	5070	8.5	8.6997	12.7693
35,556	4832	7.1	18.7607	13.8140	36,139	4948	8.2	21.7051	20.3163	36,813	5075	9.2	12.0191	24.6783
35,537	4836	8.5	19.6953	12.3405	36,074	4950	8.4	22.0562	13.6475	36,688	5076	9.0	12.0668	5.9990
35,612	4841	8.5	22.1735	19.1781	35,979	4957	9.0	25.7181	4.3158	36,715	5077	8.5	12.4137	9.6491
35,497	4842	9.0	22.5487	6.4230	<b>R.A. 11<sup>h</sup> 16<sup>m</sup></b>					36,722	5084	8.5	16.4197	10.9556
35,529	4845	7.2	23.6204	10.7152	36,220	4957	9.0	2.9245	4.3013	36,690	5085	8.4	16.4708	5.4703
35,640	4846	8.7	23.8116	22.3763	36,378	4966	7.9	7.8650	21.1532	36,816	5088	8.9	17.6646	24.3361
35,627	4848	9.2	25.3663	20.2648	36,315	4967	9.2	8.1232	16.3878	36,733	5091	8.8	20.4567	12.6039
<b>R.A. 11<sup>h</sup> 0<sup>m</sup></b>					36,286	4973	7.5	10.7439	13.3460	36,701	5092	9.2	21.0513	7.6445
35,796	4845	7.2	0.8997	10.7236	36,234	4975	8.4	11.4335	5.4531	36,670	5094	9.1	21.3553	2.7241
35,908	4846	8.7	1.2235	22.3821	36,265	4977	8.9	12.7187	9.8530	36,818	5098	9.5	22.2384	24.5726
35,893	4848	9.2	2.7540	20.2524	36,215	4978	9.1	12.8119	3.1196	36,677	5099	8.8	22.7460	3.4011
35,853	4849	9.0	3.1439	16.3137	36,406	4980	8.1	14.2540	23.8276	36,735	5100	8.4	22.7220	11.8525
35,861	4851	8.9	3.8436	17.6492	36,235	4981	8.8	14.8346	6.0018	<b>R.A. 11<sup>h</sup> 40<sup>m</sup></b>				
35,882	4852	8.3	4.0429	19.2708	36,416	4983	8.4	15.2787	24.5001	36,918	5110	8.3	4.2089	11.6926
35,846	4861	9.0	7.2664	15.0426	36,338	4987	7.9	17.9786	16.8226	36,996	5111	6.4	4.5554	21.8741
35,833	4865	6.5	10.1313	14.3381	36,432	4990	7.4	18.5707	25.9338	36,955	5118	7.2	8.2677	16.2197
35,915	4869	9.2	11.5865	23.0782	36,350	4991	8.7	19.4806	18.2796	37,007	5124	8.9	11.7579	23.3219
35,835	4871	9.0	11.6834	14.5134	36,222	4992	5.7	19.8670	3.7760	36,876	5126	8.8	13.1405	5.0299
35,919	4876	8.3	15.5894	23.4179	36,339	4995	8.6	21.1959	17.3241	36,889	5134	8.4	17.5127	6.4291
35,867	4879	9.1	17.3559	17.4015	36,239	4997	8.6	22.0228	6.1654	36,922	5135	8.1	17.6960	11.9738
35,722	4880	8.8	17.4079	4.0601	36,281	5001	8.8	23.4717	12.3460	36,878	5137	9.1	18.1617	5.2838
35,729	4884	9.3	18.3666	4.9793	36,324	5002	9.0	23.5613	16.5057	36,884	5141	8.5	19.7034	5.5409
35,781	4895	8.9	23.7377	9.0473	<b>R.A. 11<sup>h</sup> 24<sup>m</sup></b>					36,903	5142	7.9	19.7880	8.7006
35,887	4896	8.3	23.7511	19.2109	36,512	5001	8.8	0.7696	12.3560	36,916	5143	8.4	20.6316	11.1594
35,888	4898	9.2	24.0456	19.7320	36,538	5002	9.0	0.9064	16.5145	36,924	5144	8.6	20.6390	12.2988
35,815	4900	6.7	24.3723	11.5279	36,588	5009	6.6	4.6785	25.3990	36,989	5147	9.2	23.0414	20.5647
35,927	4903	8.3	24.7294	24.7014	36,547	5011	9.1	4.9726	18.5047	36,964	5149	9.1	24.0011	17.2929
35,734	4904	8.6	25.0368	4.8048	36,484	5012	8.6	5.0267	7.3474	36,893	5150	8.9	24.4964	7.4711
35,903	4905	9.0	25.0968	20.4829	36,485	5016	8.4	6.4466	7.2961	37,002	5152	8.7	24.7750	22.4886
<b>R.A. 11<sup>h</sup> 8<sup>m</sup></b>					36,507	5017	8.9	7.4038	11.8191	36,908	5154	8.8	25.6952	8.6642
36,012	4895	8.9	0.9981	9.0543	36,489	5018	7.1	7.4091	8.7973	<b>R.A. 11<sup>h</sup> 48<sup>m</sup></b>				
36,117	4896	8.3	1.1270	19.2175	36,491	5025	8.6	10.0361	9.3838	37,183	5147	9.2	0.4326	20.5795
36,128	4898	9.2	1.4275	19.7351	36,552	5028	8.9	10.4386	18.9155	37,168	5149	9.1	1.3553	17.2967
36,039	4900	6.7	1.6609	11.5276	36,469	5029	8.8	10.5590	4.7320	37,099	5150	8.9	1.7388	7.4698
36,170	4903	8.3	2.1676	24.6960	36,457	5030	8.5	10.8424	2.0975					
35,981	4904	8.6	2.2489	4.7978	36,533	5032	8.7	13.1751	15.9080					



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.
<b>R.A. 11<sup>h</sup> 48<sup>m</sup> (continued)</b>					<b>R.A. 12<sup>h</sup> 4<sup>m</sup> (continued)</b>					<b>R.A. 12<sup>h</sup> 28<sup>m</sup></b>				
37,195	5152	8.7	2.1880	22.4828	37,595	5276	9.6	11.7531	19.1746	38,129	5409	9.2	4.1082	17.9613
37,112	5154	8.8	2.9511	8.6494	37,584	5278	8.8	12.5585	17.5202	38,022	5410	9.3	4.8451	3.2632
37,137	5157	8.1	5.0408	13.6119	37,585	5283	8.7	14.7543	16.8779	38,041	5411	9.1	4.9505	6.9046
37,163	5158	8.7	5.1107	16.3555	37,596	5284	9.1	14.9260	18.8791	38,181	5413	8.9	5.9079	24.5203
37,146	5160	8.9	5.6000	14.5275	37,602	5288	8.3	15.9329	20.4546	38,169	5415	8.5	6.8868	22.1543
37,069	5162	8.6	6.1752	3.1884	37,575	5289	7.7	16.3004	15.5654	38,090	5417	7.3	7.1722	13.5052
37,090	5168	8.9	7.7185	6.1181	37,591	5292	9.0	18.8644	18.5830	38,034	5418	9.0	7.2960	6.3437
37,075	5170	8.3	8.8058	3.8317	37,576	5293	9.4	19.4381	15.2242	38,182	5421	9.1	10.7285	24.2150
37,108	5172	7.9	8.8714	8.4258	37,587	5295	7.5	20.5838	17.4880	38,036	5422	8.7	10.7942	5.7912
37,117	5174	7.6	10.5090	8.8027	37,516	5296	8.3	20.6977	3.7907	38,024	5423	8.5	11.0523	3.2997
37,175	5176	8.3	10.8774	18.0083	37,592	5298	9.1	21.9009	18.2453	38,124	5425	8.7	12.0043	16.6943
37,118	5179	8.3	11.9420	8.6165	37,588	5299	7.8	21.9422	16.8191	38,114	5429	6.8	13.4168	15.8823
37,156	5180	8.7	12.5092	14.7638	37,603	5301	9.0	22.7085	19.7562	38,185	5431	8.6	14.0458	24.4561
37,076	5181	9.0	13.7405	3.5182	37,582	5302	8.7	22.8572	16.1827	38,058	5440	9.8	16.4081	7.7587
37,200	5182	8.7	14.5479	22.5699	<b>R.A. 12<sup>h</sup> 12<sup>m</sup></b>					38,188	5446	8.3	20.3701	23.9856
37,217	5183	8.6	15.1186	24.3800	37,787	5308	8.0	3.4121	22.2796	38,096	5447	9.2	20.6736	13.1545
37,219	5188	9.2	18.1431	24.3590	37,759	5309	9.5	3.4653	19.1432	38,189	5448	6.1	20.7086	24.7158
37,166	5195	9.1	20.8491	16.6139	37,685	5311	8.0	4.8045	8.1880	38,033	5450	8.6	21.6635	5.0764
37,176	5197	9.2	21.2970	18.0864	37,767	5312	8.5	5.4408	19.6262	38,039	5453	8.7	22.9504	6.4368
37,160	5201	8.5	23.1306	15.7960	37,800	5313	9.3	5.5155	23.4349	38,147	5456	8.6	24.2112	19.3717
<b>R.A. 11<sup>h</sup> 56<sup>m</sup></b>					37,801	5316	9.7	6.7412	23.4488	38,098	5457	8.6	25.6001	13.3749
37,380	5201	8.5	0.4677	15.8098	37,714	5318	8.8	7.6637	10.9947	<b>R.A. 12<sup>h</sup> 36<sup>m</sup></b>				
37,291	5205	8.0	3.8019	6.1126	37,809	5320	7.3	8.6149	24.6972	38,372	5456	8.6	1.5889	19.3728
37,397	5207	8.8	5.2075	19.2461	37,672	5321	8.6	8.9979	4.8565	38,334	5457	8.6	2.9095	13.3605
37,420	5212	7.7	7.4613	22.4183	37,707	5330	9.0	13.4185	10.2010	38,380	5458	8.9	3.1701	20.0793
37,283	5214	9.3	8.8989	4.9963	37,674	5334	9.0	15.5013	5.0734	38,268	5461	8.7	4.4717	2.6002
37,367	5217	6.2	12.2601	14.2304	37,666	5336	8.7	16.1574	2.8753	38,373	5462	8.7	5.1139	19.0669
37,456	5218	8.2	12.4303	25.9154	37,680	5345	8.9	19.5286	5.4440	38,409	5465	9.0	6.2676	24.6993
37,368	5225	8.9	13.8563	14.3535	37,695	5346	var.	19.9736	9.4219	38,344	5467	8.4	7.0148	14.9028
37,339	5226	8.7	14.2663	11.1167	37,696	5348	7.2	20.2006	8.7439	38,311	5469	8.3	7.9784	9.2789
37,340	5228	8.4	14.5243	10.3819	37,794	5349	8.7	20.2321	22.6149	38,329	5470	9.0	8.2903	12.4176
37,271	5230	8.4	14.6433	3.8282	37,710	5351	7.8	20.8211	9.6418	38,273	5475	8.9	10.1564	4.0117
37,369	5233	8.7	17.4129	14.0299	37,783	5357	8.7	22.9313	21.0937	38,306	5477	9.1	10.6800	8.0049
37,307	5236	9.4	18.1188	7.9573	37,750	5359	8.8	23.3122	17.0964	38,345	5479	8.6	11.5242	15.1419
37,320	5238	9.1	18.3527	8.9256	37,807	5361	9.1	24.8456	23.1952	38,265	5481	9.3	12.8013	2.3319
37,332	5240	8.8	19.8157	9.9085	<b>R.A. 12<sup>h</sup> 20<sup>m</sup></b>					38,414	5484	8.3	13.7323	25.8164
37,453	5241	8.9	21.1954	24.9810	37,955	5357	8.7	0.3286	21.1098	38,346	5487	6.4	14.6729	15.5327
37,310	5242	9.0	21.3888	7.8838	37,927	5359	8.8	0.6651	17.1081	38,281	5492	9.2	15.8762	4.4586
37,322	5245	9.3	22.3989	8.3082	37,973	5361	9.1	2.2666	23.1886	38,332	5493	9.1	17.0164	12.3907
37,461	5246	8.8	22.6070	25.8250	37,974	5369	8.8	6.3766	23.1132	38,283	5494	8.9	17.2528	4.8540
37,356	5248	8.7	23.7541	13.1263	37,880	5371	8.8	7.6300	7.4256	38,313	5497	8.6	18.9050	8.7888
37,342	5249	8.9	23.8813	10.8651	37,930	5374	9.2	8.5008	17.2249	38,284	5499	8.6	19.4777	4.8755
37,447	5251	9.5	24.6506	24.3417	37,946	5375	7.9	8.6357	19.3871	38,292	5502	9.2	20.7489	5.5410
<b>R.A. 12<sup>h</sup> 4<sup>m</sup></b>					37,895	5376	7.8	9.2876	9.0593	38,298	5504	8.5	20.7915	7.2677
37,561	5248	8.7	1.0609	13.1331	37,915	5377	7.6	9.7378	13.1964	38,369	5507	8.9	22.2044	17.9825
37,551	5249	8.9	1.1624	10.8704	37,947	5382	9.0	11.6102	19.2057	38,363	5509	8.4	23.2610	17.4387
37,625	5251	9.5	2.0848	24.3372	37,917	5384	8.7	12.1107	12.9315	38,394	5510	8.8	24.1754	21.3749
37,612	5255	8.8	4.4568	21.8084	37,933	5385	8.8	12.1653	16.7972	38,387	5512	7.5	25.0984	20.2208
37,593	5257	8.4	4.7947	18.8164	37,905	5389	8.0	13.8245	10.6515	<b>R.A. 12<sup>h</sup> 44<sup>m</sup></b>				
37,627	5261	9.4	6.7941	23.9562	37,900	5391	8.0	16.7610	10.1447	38,538	5509	8.4	0.6167	17.4509
37,563	5262	8.5	7.0492	12.6809	37,941	5393	9.0	18.4771	18.1294	38,565	5510	8.8	1.5759	21.3764
37,631	5263	9.2	7.4531	25.2117	37,942	5395	8.6	18.5531	17.9423	38,557	5512	7.5	2.4857	20.2115
37,606	5266	9.3	8.7827	21.5733	37,978	5396	8.9	18.8468	23.5820	38,550	5515	8.3	3.6936	19.3648
37,607	5267	9.0	9.2757	21.1517	37,950	5400	9.3	21.6376	19.5957	38,485	5516	9.4	4.5775	7.3171
37,580	5269	8.6	10.2219	15.9409	37,884	5401	8.8	21.7304	6.9437	38,486	5520	8.6	5.7180	6.6814
37,532	5274	8.5	11.1191	7.2305	37,918	5402	9.5	21.7622	13.3123	38,545	5521	8.6	6.3986	17.6835
37,594	5275	10.0	11.6731	18.8213						38,527	5523	8.7	7.1898	14.3401
										38,487	5524	6.7	7.5725	6.5022



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
R.A. 12 <sup>h</sup> 44 <sup>m</sup> (continued)					R.A. 13 <sup>h</sup> 0 <sup>m</sup> (continued)					R.A. 13 <sup>h</sup> 24 <sup>m</sup> (continued)				
38,481	5526	8.5	8.1478	5.8834	38,896	5628	8.3	17.8612	20.2734	39,357	5735	9.2	10.2264	9.6798
38,489	5527	9.3	8.7537	7.2523	38,861	5629	8.8	18.6168	12.2276	39,318	5738	6.5	13.2408	3.5317
38,531	5529	8.5	9.6499	15.4915	38,910	5630	9.2	19.0255	21.7450	39,415	5742	7.6	14.6910	22.5476
38,567	5533	8.9	11.3952	21.4729	38,837	5632	8.0	20.2129	7.0307	39,339	5743	8.9	15.3062	7.2341
38,529	5534	8.2	11.6781	14.3741	38,883	5633	9.0	20.3043	16.7676	39,365	5747	9.0	16.7742	11.4519
38,548	5536	8.9	12.0380	18.1346	38,877	5637	9.0	23.8334	15.5167	39,374	5748	7.5	17.2906	13.5223
38,597	5538	8.7	12.6942	25.7572	38,937	5639	7.8	24.2982	25.7757	39,345	5750	9.1	18.1831	7.8485
38,577	5539	9.0	12.7129	21.9942	38,899	5641	7.7	24.7386	20.1176	39,320	5754	6.0	20.5612	3.5738
38,541	5542	8.5	13.6506	17.2194	38,914	5643	9.4	25.7830	21.7113	39,359	5756	8.7	21.5191	10.1119
38,578	5546	8.9	15.5366	22.8363						39,360	5758	8.7	23.2913	9.8958
38,477	5547	9.2	16.5180	5.1167	R.A. 13 <sup>h</sup> 8 <sup>m</sup>					39,399	5759	7.4	23.6480	18.7340
38,457	5549	9.1	17.9084	2.3273	39,058	5637	9.0	1.1673	15.5225	R.A. 13 <sup>h</sup> 32 <sup>m</sup>				
38,580	5550	8.8	18.4533	22.8655	39,135	5639	7.8	1.7487	25.7753	39,517	5758	8.7	0.5613	9.9079
38,482	5551	8.5	20.4817	5.8070	39,092	5641	7.7	2.1247	20.1125	39,573	5759	7.4	1.0185	18.7417
38,581	5552	9.1	20.8820	22.3595	39,111	5643	9.4	3.1870	21.6938	39,505	5763	8.5	4.3488	8.1545
38,573	5556	8.9	23.9242	21.0833	39,118	5644	9.1	3.2524	22.7302	39,599	5764	8.8	4.4249	24.3491
38,542	5557	8.6	24.8726	17.0001	38,986	5647	9.0	3.9136	5.4133	39,601	5766	9.2	6.5360	24.1140
R.A. 12 <sup>h</sup> 52 <sup>m</sup>					39,061	5649	9.0	5.0027	15.5422	39,544	5771	9.0	10.3523	13.9241
38,763	5556	8.9	1.3214	21.0878	39,038	5651	9.0	6.2653	12.5804	39,545	5777	9.1	13.1035	14.3263
38,743	5557	8.6	2.2233	16.9937	38,976	5653	8.7	6.7691	4.2518	39,584	5780	8.8	14.0586	20.8567
38,764	5561	9.0	3.9359	21.2340	39,018	5654	9.3	7.7906	10.2910	39,511	5784	8.4	15.0789	9.1520
38,758	5563	7.0	5.0885	19.6816	39,034	5658	9.3	11.1780	11.9715	39,607	5786	8.7	15.4571	23.9922
38,707	5564	9.1	6.2051	11.2944	38,989	5659	9.2	11.5095	6.1691	39,512	5787	9.0	15.9544	9.1144
38,714	5565	9.0	6.8008	12.1790	39,062	5661	9.3	12.7644	15.6793	39,566	5789	9.1	17.2647	17.2389
38,690	5568	9.1	7.8460	8.0871	39,115	5663	8.8	13.0301	21.8945	39,546	5790	8.8	17.8437	14.4596
38,751	5570	9.5	9.4343	18.7167	38,982	5664	7.2	13.2886	4.5483	39,551	5791	9.2	18.0029	15.4161
38,765	5571	8.3	9.5247	21.0766	39,107	5665	9.0	14.0932	21.3314	39,516	5798	8.0	25.2207	8.6064
38,666	5572	9.2	9.9291	3.5333	39,077	5667	5.5	15.3519	17.8728	39,502	5799	7.7	25.6568	6.7888
38,728	5573	7.3	10.1579	14.0853	38,999	5670	8.9	17.5762	7.0712	R.A. 13 <sup>h</sup> 40 <sup>m</sup>				
38,771	5574	9.0	11.0591	23.4106	39,015	5672	8.8	18.3011	9.0908	39,703	5798	8.0	2.4759	8.5971
38,735	5576	9.2	13.3499	15.1990	38,990	5673	8.8	18.3761	5.6960	39,693	5799	7.7	2.8914	6.7747
38,741	5578	8.2	13.8098	15.5172	39,079	5675	6.4	20.2628	17.9460	39,727	5802	8.9	4.3770	11.7245
38,696	5580	9.0	14.7738	8.7770	39,144	5677	8.9	20.8066	25.8496	39,766	5805	8.7	6.0974	17.8786
38,760	5582	9.3	15.4564	19.5864	R.A. 13 <sup>h</sup> 16 <sup>m</sup>					39,702	5811	9.1	11.6301	8.3653
38,772	5583	7.9	15.7079	23.1087	39,277	5688	9.1	4.8356	25.0985	39,754	5812	9.0	11.9703	15.6973
38,717	5588	9.0	19.8883	12.1985	39,253	5691	8.5	6.4723	18.7392	39,718	5813	8.3	12.8192	10.9603
38,770	5591	7.8	20.0544	22.0312	39,278	5694	8.9	8.7797	25.4793	39,770	5817	8.6	17.2210	18.2647
38,754	5592	9.2	20.9317	18.7369	39,176	5695	9.1	8.8981	4.3343	39,714	5821	6.8	18.0187	10.0682
38,718	5593	8.3	21.2434	12.3257	39,271	5698	8.7	10.6562	23.1574	39,793	5823	8.0	18.0898	22.4433
38,774	5594	9.4	21.7983	23.0990	39,216	5702	7.0	13.3442	12.5827	39,721	5824	9.0	18.3659	11.0741
38,775	5596	9.1	22.6307	22.8802	39,171	5703	7.6	14.1547	3.6144	39,805	5825	9.0	18.8641	23.4485
38,776	5597	9.3	22.7305	24.0125	39,263	5708	8.8	16.4856	20.3585	39,806	5829	8.3	19.2181	22.9056
R.A. 13 <sup>h</sup> 0 <sup>m</sup>					39,213	5709	9.4	16.8623	12.3608	39,665	5831	7.3	20.0731	1.8943
38,873	5602	7.8	3.2719	15.8453	39,199	5711	9.0	17.9651	9.1474	39,708	5834	9.2	22.5684	8.6424
38,894	5604	9.0	3.7644	19.7935	39,273	5718	8.3	24.2327	23.6600	39,776	5840	8.5	24.7529	19.3645
38,888	5606	9.5	4.6191	19.0980	39,266	5720	8.4	24.6740	20.9278	R.A. 13 <sup>h</sup> 48 <sup>m</sup>				
38,886	5607	9.3	5.5789	17.3468	39,196	5722	9.0	25.6302	8.0862	39,973	5840	8.5	2.1305	19.3594
38,923	5608	8.5	6.3523	24.4204	R.A. 13 <sup>h</sup> 24 <sup>m</sup>					39,909	5842	8.9	3.5644	11.2885
38,901	5609	9.3	6.4279	20.7262	39,427	5718	8.3	1.6591	23.6607	39,919	5846	8.2	4.5139	11.9796
38,839	5610	8.2	6.5430	7.4768	39,405	5720	8.4	2.0693	20.9233	39,965	5847	6.5	4.7888	17.8406
38,871	5613	8.8	7.7581	14.6762	39,342	5722	9.0	2.8795	8.0723	40,042	5848	8.9	5.1424	25.9077
38,925	5614	9.2	8.2978	23.7409	39,388	5724	7.5	3.1490	16.5630	39,967	5853	9.2	8.7822	18.0007
38,935	5615	6.1	8.5224	25.5624	39,417	5729	8.8	6.2696	23.0709	39,876	5856	7.0	10.6844	3.5847
38,835	5620	8.7	13.4497	6.3139	39,315	5731	8.7	6.4993	3.0614	39,877	5857	9.0	11.1723	3.1601
38,819	5622	8.6	14.3066	4.4773	39,418	5732	8.6	6.6564	22.8079					
38,903	5623	9.0	15.2316	21.2515										
38,890	5624	8.5	16.0359	19.2838										
38,830	5625	8.6	16.1696	5.9691										



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.
<b>R.A. 13<sup>h</sup> 48<sup>m</sup> (continued)</b>					<b>R.A. 14<sup>h</sup> 12<sup>m</sup> (continued)</b>					<b>R.A. 14<sup>h</sup> 36<sup>m</sup></b>				
39,995	5859	9.5	12.6446	21.4017	40,607	5984	9.0	15.3943	8.4210	41,414	6090	8.8	2.2379	24.9275
39,979	5860	9.3	12.8021	19.1959	40,656	5985	8.8	15.5008	14.1988	41,355	6094	8.7	4.9501	19.1230
39,900	5862	8.8	14.3263	9.1014	40,577	5986	6.5	16.1523	4.0408	41,376	6097	9.4	6.6657	21.2399
39,938	5869	9.1	17.1002	13.9752	40,565	5989	8.0	18.4204	1.7603	41,301	6098	8.7	6.3500	13.2961
39,904	5871	7.2	17.3950	9.7154	40,633	5992	8.2	22.3304	11.5183	41,410	6099	8.4	6.4156	24.1121
39,912	5872	9.0	17.5804	11.0180	40,603	5994	8.3	23.0062	7.4287	41,346	6100	8.8	6.8107	18.2300
40,016	5873	9.0	18.0403	23.2040	40,586	5995	9.0	23.7474	5.3026	41,384	6101	9.3	7.0995	21.9743
39,989	5875	8.5	18.3611	20.5698	40,671	5997	8.8	24.1374	15.7002	41,317	6103	8.8	8.2844	15.5160
40,008	5880	8.9	19.6916	22.1325	40,641	5998	8.9	24.1071	11.6507	41,367	6104	9.2	8.3320	19.9062
39,906	5881	8.1	21.4882	9.9288	40,590	6002	9.0	25.5274	5.1185	41,368	6105	9.3	8.4589	19.7425
39,990	5886	8.8	23.0092	20.4980						41,289	6106	9.0	9.0627	12.2346
<b>R.A. 13<sup>h</sup> 56<sup>m</sup></b>					<b>R.A. 14<sup>h</sup> 20<sup>m</sup></b>					41,329	6109	9.1	10.1676	16.6288
40,241	5886	8.8	0.3997	20.5132	40,840	5994	8.3	0.2482	7.4439	41,244	6110	8.9	11.1820	5.4315
40,121	5892	9.1	3.3336	3.6375	40,829	5995	9.0	0.9652	5.3097	41,357	6112	7.5	12.4193	18.9836
40,111	5893	9.1	3.7800	2.5732	40,898	5997	8.8	1.4734	15.7023	41,421	6113	9.4	12.8177	25.0785
40,243	5897	8.9	5.8775	19.7086	40,876	5998	8.9	1.3970	11.6535	41,389	6115	9.0	13.2550	22.3229
40,113	5898	7.1	6.0798	2.6536	40,832	6002	9.0	2.7429	5.1069	41,228	6116	8.4	13.6112	3.9006
40,216	5900	9.3	7.2096	15.6538	40,976	6004	9.0	4.2030	25.3040	41,294	6119	7.4	16.2388	11.6306
40,276	5903	8.6	9.1761	24.1915	40,958	6007	8.6	5.7519	21.9773	41,350	6121	9.1	16.8576	18.7047
40,122	5904	9.0	10.3943	3.2903	40,900	6008	9.0	6.8742	15.4313	41,265	6123	9.1	18.1449	8.4917
40,208	5905	9.1	11.2373	15.5071	40,945	6014	8.6	8.4454	21.4669	41,254	6125	8.5	18.5182	7.3426
40,221	5911	7.4	15.9140	16.9273	40,918	6015	7.7	8.5284	17.1459	41,426	6131	9.0	21.6378	25.7215
40,128	5915	9.2	17.9352	3.5856	40,910	6016	9.0	8.8220	16.5405	41,407	6133	9.3	23.6409	23.7504
40,230	5917	8.7	19.0866	18.5147	40,901	6017	7.9	9.7742	15.7679	41,274	6134	9.0	24.2682	8.8329
40,285	5924	9.0	23.2371	25.7112	40,870	6019	9.1	10.8922	11.4661	41,257	6136	8.1	25.2453	7.5345
<b>R.A. 14<sup>h</sup> 4<sup>m</sup></b>					40,935	6023	7.5	12.6512	19.1589	41,269	6138	8.2	25.6096	7.7314
40,496	5924	9.0	0.6869	25.7236	40,936	6024	7.6	12.7521	19.2095	<b>R.A. 14<sup>h</sup> 44<sup>m</sup></b>				
40,458	5930	8.3	4.4455	20.1674	40,892	6026	9.0	13.6285	13.8204	41,617	6133	9.3	1.0684	23.7579
40,499	5931	9.0	5.1353	25.2961	40,902	6029	8.9	15.3289	14.9494	41,516	6134	9.0	1.5261	8.8340
40,464	5932	9.1	5.1451	21.4602	40,835	6031	8.8	15.9626	5.4348	41,508	6136	8.1	2.4883	7.5248
40,389	5933	7.8	6.2902	10.6942	40,912	6034	9.2	17.5720	16.1474	41,509	6138	8.2	2.8549	7.7177
40,331	5935	8.8	7.1337	4.5471	40,863	6038	9.3	19.4542	10.1003	41,492	6140	9.3	3.2876	5.6365
40,427	5940	8.4	8.6896	15.9564	40,874	6039	9.0	19.8860	11.1967	41,565	6143	9.1	4.6446	16.0764
40,346	5941	9.1	9.5120	5.6890	40,856	6042	9.3	20.9076	9.0926	41,536	6147	8.9	5.1501	12.0910
40,383	5944	6.8	11.5244	10.2306	40,858	6047	9.2	23.2597	9.3142	41,578	6148	9.3	5.1988	17.7643
40,441	5947	9.1	12.0989	18.2020	40,828	6049	9.0	24.2125	4.0493	41,465	6150	9.0	6.5979	1.7828
40,322	5951	8.7	16.3141	4.1131	40,867	6051	8.9	24.9778	9.8297	41,586	6154	7.4	12.4551	18.8533
40,377	5952	8.6	17.1491	9.0749	<b>R.A. 14<sup>h</sup> 28<sup>m</sup></b>					41,549	6155	9.0	12.8767	14.1000
40,409	5955	8.8	18.2167	13.3005	41,055	6047	9.2	0.5231	9.3266	41,512	6156	8.6	13.1930	7.3136
40,369	5957	7.9	19.3624	7.5695	41,019	6049	9.0	1.4160	4.0514	41,504	6164	8.7	15.4239	6.2830
40,417	5958	9.1	19.5228	14.3355	41,060	6051	8.9	2.2470	9.8229	41,531	6165	8.7	15.4452	10.5842
40,325	5959	9.0	21.1230	4.3277	41,150	6052	8.9	3.6552	23.7755	41,480	6167	8.4	15.6908	3.5971
40,483	5962	8.5	25.5943	21.9140	41,110	6060	8.2	6.2167	19.3998	41,559	6168	8.6	15.8639	14.6901
<b>R.A. 14<sup>h</sup> 12<sup>m</sup></b>					41,021	6063	9.0	7.7993	4.1390	41,551	6171	8.3	16.5958	13.7975
40,714	5962	8.5	3.0007	21.8986	41,034	6067	8.4	10.0504	5.5658	41,505	6172	8.1	17.3833	7.0522
40,738	5964	9.2	4.6470	25.2670	41,065	6070	8.9	12.9953	11.2227	41,489	6173	9.2	18.2941	4.2125
40,566	5967	8.8	5.5491	2.8399	41,061	6072	8.9	13.6212	10.0768	41,475	6174	8.9	18.5047	2.2310
40,692	5968	9.3	5.8286	18.9501	41,082	6074	8.4	14.5829	13.9544	41,544	6179	8.9	20.5957	13.3724
40,694	5971	9.2	7.5386	18.8645	41,066	6075	8.4	14.8139	10.4441	41,483	6181	8.3	22.9582	4.0223
40,568	5974	6.5	11.6674	2.4583	41,164	6078	6.8	16.4295	25.0124	41,527	6185	8.2	24.2665	9.8933
40,743	5976	8.7	12.2806	25.0850	41,035	6079	9.1	18.0730	5.6496	41,597	6186	7.9	24.3107	19.7869
40,696	5978	6.9	12.7346	18.9952	41,088	6080	8.8	18.0610	15.4145	41,491	6188	9.3	24.8548	5.2423
40,648	5979	9.3	12.7911	13.2603	41,048	6081	9.0	19.6444	7.4337	<b>R.A. 14<sup>h</sup> 52<sup>m</sup></b>				
40,660	5982	8.8	14.5434	15.0073	41,141	6083	9.1	20.5681	22.2188	41,707	6185	8.2	1.5365	9.8944
40,713	5983	8.5	14.6151	21.5065	41,036	6085	9.3	21.9930	5.8261	41,764	6186	7.9	1.6931	19.7869
					41,132	6086	8.8	22.0295	21.1866	41,679	6188	9.3	2.0719	5.2372
					41,166	6090	8.8	24.7971	24.9338	41,693	6190	9.2	3.6166	7.5763
										41,765	6192	7.5	5.7227	20.2797



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
R.A. 14 <sup>h</sup> 52 <sup>m</sup> (continued)					R.A. 15 <sup>h</sup> 8 <sup>m</sup> (continued)					R.A. 15 <sup>h</sup> 24 <sup>m</sup> (continued)				
41,774	6193	9.0	7.2148	21.7944	42,220	6297	8.8	10.8172	21.9650	42,665	6414	9.2	19.6391	19.6856
41,793	6194	8.2	8.7698	24.8166	42,166	6298	8.9	10.8417	11.9969	42,696	6415	9.1	20.5281	23.1102
41,685	6196	8.0	9.2312	7.2821	42,223	6299	8.8	11.7830	23.5262	42,677	6416	9.0	20.9645	21.0241
41,752	6198	9.2	10.1213	19.1690	42,191	6300	6.9	11.9305	16.2513	42,610	6417	8.6	21.0314	13.7740
41,736	6199	9.1	10.3682	15.9308	42,114	6301	9.2	13.3284	2.3475	42,634	6418	6.1	21.1133	16.9769
41,775	6204	8.9	12.6366	21.7427	42,224	6303	9.1	13.8283	23.0856	42,667	6423	8.8	22.6160	19.7770
41,744	6205	8.8	15.6017	16.9041	42,142	6305	7.1	14.8517	7.9601	42,704	6424	9.1	23.3885	23.9063
41,718	6208	9.3	16.6697	12.1867	42,157	6307	8.2	15.2739	11.4536	42,685	6425	8.9	23.5754	21.6619
41,758	6209	8.8	17.2002	19.4184	42,108	6308	6.9	15.3254	1.6542	42,626	6427	9.0	25.0281	15.9370
41,721	6211	8.5	17.8054	13.1065	42,109	6309	8.8	15.4223	1.7774					
41,740	6212	9.4	18.4394	16.9106	42,176	6311	9.4	15.8937	13.4088					
41,762	6214	8.9	18.8116	19.2305	42,227	6314	9.1	18.0151	23.1443					
41,719	6215	8.0	18.8515	11.8793	42,189	6316	8.9	18.9653	15.0890					
41,777	6217	8.9	19.5914	22.0012	42,242	6317	9.0	19.7624	25.6865					
41,672	6218	8.0	20.7823	3.7678	42,154	6318	8.9	19.9391	9.9512					
41,663	6220	9.1	21.6452	1.6067	42,122	6320	8.2	20.5601	4.1189					
41,714	6224	8.4	23.9264	11.4456	42,209	6321	8.7	21.5626	20.5890					
41,683	6225	7.8	24.0089	5.9171	42,155	6325	9.1	22.9031	9.7729					
41,803	6227	8.8	25.2131	25.7797	42,148	6326	9.0	23.4135	8.7956					
41,784	6228	8.7	25.5693	23.6287	42,139	6330	9.2	25.3946	7.2422					
R.A. 15 <sup>h</sup> 0 <sup>m</sup>					R.A. 15 <sup>h</sup> 16 <sup>m</sup>					R.A. 15 <sup>h</sup> 32 <sup>m</sup>				
41,933	6224	8.4	1.2141	11.4505	42,319	6326	9.0	0.6710	8.8063	42,978	6424	9.1	0.8177	23.9171
41,891	6225	7.8	1.2337	5.9213	42,306	6330	9.2	2.6343	7.2310	42,956	6425	8.9	0.9792	21.6704
42,046	6227	8.8	2.6635	25.7685	42,359	6337	8.9	4.7249	13.2378	42,884	6427	9.0	2.3667	15.9290
42,028	6228	8.7	2.9952	23.6134	42,397	6339	9.0	5.4351	18.6228	42,841	6431	8.8	3.8328	9.6397
41,935	6234	9.2	4.7276	12.2857	42,421	6340	9.0	6.5583	20.1057	42,940	6433	9.2	5.3773	21.3703
41,858	6235	9.1	4.7457	1.6181	42,341	6341	7.9	6.5997	10.6615	42,959	6436	9.8	5.7279	21.5686
41,874	6242	9.1	10.9084	3.3668	42,375	6343	7.7	7.7020	15.2518	42,885	6437	9.0	5.9878	15.4178
41,963	6244	9.0	11.8872	15.5833	42,308	6347	8.6	11.0519	7.2922	42,818	6438	8.9	6.0469	7.8250
41,876	6245	8.9	12.0862	3.8394	42,292	6348	8.4	11.1888	4.5530	42,794	6439	8.6	6.1804	5.6818
42,016	6246	9.2	12.7844	21.7652	42,376	6356	8.9	15.1950	14.7299	42,894	6440	9.3	6.7421	16.5293
42,043	6248	8.2	13.2857	25.3230	42,309	6360	8.6	16.7236	6.8316	42,845	6441	9.1	7.9756	10.2655
41,939	6251	7.8	14.6023	12.8657	42,401	6361	8.6	17.1340	18.1665	42,915	6446	9.1	9.6956	18.8346
41,924	6252	9.0	14.6727	10.0590	42,402	6363	8.9	18.5512	17.7723	42,856	6447	9.1	10.0813	11.1512
41,925	6255	9.0	14.9819	9.5350	42,334	6367	9.2	19.9995	10.0225	42,987	6449	9.3	10.3673	25.1968
41,997	6257	9.2	15.6720	20.0504	42,393	6369	9.4	20.3379	17.5358	42,764	6453	8.1	11.6037	1.0530
42,023	6258	8.9	15.9803	22.7890	42,423	6370	8.1	20.7991	20.3229	42,868	6456	9.0	12.9409	14.1393
42,025	6259	8.5	17.4809	23.0493	42,336	6371	9.1	21.3901	9.8436	42,857	6457	8.6	12.9466	11.9503
42,008	6262	9.5	18.7506	21.0772	42,255	6374	9.2	21.9871	1.3031	42,990	6461	8.7	14.4772	25.2428
41,991	6264	9.1	20.3547	18.5897	42,277	6378	8.0	24.9047	2.9975	42,928	6462	7.2	14.9193	19.9865
41,931	6265	8.9	21.3828	11.1174	42,287	6380	9.3	25.5826	3.8762	42,917	6464	8.8	15.1070	18.4415
42,044	6271	9.0	22.3015	25.2564						42,772	6465	8.4	15.2570	2.4487
41,937	6274	9.0	22.8931	12.0811						42,970	6467	8.5	15.6281	22.9729
41,982	6275	9.5	22.9110	17.7045						42,860	6468	5.8	16.2650	12.6747
41,865	6277	8.9	24.0047	1.2305						42,905	6472	8.0	16.5036	17.8610
41,907	6281	9.1	25.0379	7.6440						42,758	6474	9.1	18.1227	0.8283
41,995	6282	9.3	25.3883	18.9953						42,769	6475	9.1	18.1427	1.2113
R.A. 15 <sup>h</sup> 8 <sup>m</sup>					R.A. 15 <sup>h</sup> 24 <sup>m</sup>					R.A. 15 <sup>h</sup> 40 <sup>m</sup>				
42,199	6275	9.5	0.2697	17.7209	42,517	6378	8.0	2.0962	2.9920	43,115	6489	9.0	1.7240	6.2679
42,105	6277	8.9	1.1762	1.2349	42,530	6380	9.3	2.7840	3.8632	43,180	6490	8.6	2.1334	14.6955
42,140	6281	9.1	2.2822	7.6366	42,673	6383	7.3	4.7778	20.8762	43,192	6492	4.5	2.1904	17.2836
42,206	6282	9.3	2.7616	18.9829	42,536	6387	9.2	6.8681	3.8625	43,181	6497	9.0	3.3186	15.0380
42,171	6283	9.4	3.1915	13.2021	42,621	6388	9.3	7.3606	16.4474	43,228	6498	8.8	3.4810	19.5748
42,118	6286	9.0	5.3310	3.3328	42,652	6389	9.2	7.9419	19.5357	43,093	6499	7.7	4.1790	4.4577
42,201	6292	4.6	8.8095	17.9649	42,551	6395	8.2	10.1803	5.5063	43,281	6500	9.0	4.7381	24.1396
42,152	6293	7.0	8.7969	9.7450	42,689	6396	8.7	10.6254	23.3453	43,182	6502	9.1	5.4297	15.2088
42,202	6294	9.2	8.9893	18.0373	42,606	6399	9.0	12.0813	13.7079	43,216	6505	8.9	8.5832	18.6522
42,133	6296	9.0	10.3384	6.3002	42,661	6400	9.0	13.6836	20.0963	43,202	6507	8.9	8.9675	17.7546
					42,662	6401	9.2	13.7371	20.5174	43,261	6508	9.2	10.1327	21.8514
					42,511	6402	9.0	13.7544	2.1285	43,117	6511	9.2	10.5821	6.2128
					42,564	6408	7.9	16.7936	6.9237	43,145	6513	7.7	11.9875	10.5096
					42,695	6409	7.0	18.5581	22.8835					
					42,632	6410	9.0	18.7924	17.2163					
					42,526	6412	8.7	19.4665	2.7540					



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.
<b>R.A. 15<sup>h</sup> 40<sup>m</sup> (continued)</b>					<b>R.A. 15<sup>h</sup> 56<sup>m</sup> (continued)</b>					<b>R.A. 16<sup>h</sup> 20<sup>m</sup> (continued)</b>				
43,188	6516	9.2	13.8101	15.9269	43,730	{ 6639	2.0	23.2376	19.4099	44,199	6766	9.3	10.6205	16.0697
43,178	6517	8.9	14.1465	13.6393		{ 6640	8.1	23.2553	19.3663	44,206	6768	8.8	11.8592	20.2823
43,195	6518	9.1	15.2646	16.6767	43,638	6641	9.1	23.3589	5.7010	44,182	6770	8.7	15.4479	11.8518
43,150	6519	8.8	16.4856	10.8698	43,713	6644	8.0	24.1396	17.9302	44,124	6771	5.0	16.4952	3.7555
43,075	6521	8.7	17.1495	2.9354	43,688	6649	8.7	25.5304	14.3125	44,115	6776	8.8	24.0349	1.2563
43,210	6525	8.8	18.8131	17.7207	43,731	6650	9.0	25.5857	19.1813	44,144	6777	8.1	24.1017	6.4735
43,237	6527	9.3	19.0108	19.5745	<b>R.A. 16<sup>h</sup> 4<sup>m</sup></b>					44,122	6779	8.9	26.2015	2.4587
43,077	6530	8.4	20.4890	2.5686	43,896	{ 6639	2.0	0.6157	19.4224	<b>R.A. 16<sup>h</sup> 28<sup>m</sup></b>				
43,222	6531	9.1	20.4777	18.6048		{ 6640	8.1	0.6329	19.3786	44,259	6776	8.8	1.2068	1.2605
43,275	6532	9.2	21.1052	23.2590	43,828	6641	9.1	0.5812	5.7123	44,282	6777	8.1	1.3328	6.4766
43,158	6533	8.3	21.1788	11.9196	43,884	6644	8.0	1.5009	17.9323	44,264	6779	8.9	3.3867	2.4392
43,179	6535	9.0	21.5789	14.2875	43,865	6649	8.7	2.8505	14.2989	44,343	6786	9.1	9.3150	23.3201
43,225	6537	8.7	22.1552	19.1550	43,898	6650	9.0	2.9610	19.1664	44,312	6787	9.0	9.6425	17.5359
43,111	6539	7.9	22.5721	5.7846	43,829	6651	8.9	3.4581	5.6487	44,339	6792	8.6	15.6113	21.7852
43,299	6540	7.7	23.0479	24.7685	43,821	6661	7.7	6.1371	2.1816	44,266	6793	8.9	16.0621	2.1273
43,241	6544	9.1	25.2086	20.5469	43,912	6663	8.9	7.3796	21.6600	44,349	6794	9.0	16.0710	24.0691
<b>R.A. 15<sup>h</sup> 48<sup>m</sup></b>					43,803	6666	7.0	8.3021	0.6692	44,285	6796	8.4	17.8074	6.5947
43,577	6540	7.7	0.4869	24.7832	43,843	6671	7.6	10.8762	9.7544	44,357	6797	9.0	17.8900	25.5954
43,521	6544	9.1	2.5995	20.5363	43,868	6675	8.3	11.6910	15.3037	44,279	6798	8.8	19.4832	5.2449
43,351	6548	9.2	4.0965	0.8502	43,816	6678	6.7	13.4616	1.8999	44,301	6800	8.9	20.6515	13.8585
43,390	6549	9.1	4.1804	5.9647	43,869	6683	9.0	15.5065	14.5649	44,351	6801	9.1	20.6343	24.3543
43,535	6551	8.9	5.3226	21.4788	43,916	6685	8.9	16.0135	21.9949	44,315	6802	8.7	20.9228	17.7812
43,416	6556	7.0	6.9652	8.6472	43,920	6689	9.7	18.0776	23.3232	44,268	6806	8.6	23.7443	3.0495
43,367	6558	7.1	8.8262	2.6403	43,870	6693	6.8	19.1272	15.2946	<b>R.A. 16<sup>h</sup> 36<sup>m</sup></b>				
43,583	6559	9.3	10.1523	24.9931	43,871	6694	4.8	19.1787	15.4210	44,413	6806	8.6	0.9365	3.0568
43,438	6560	9.2	11.2217	11.1045	43,806	6696	7.5	19.4756	0.6818	44,401	6809	7.9	3.5161	1.2542
43,558	6562	5.3	11.6639	23.4219	43,851	6697	7.7	19.5382	10.6453	44,449	6810	7.2	3.7689	8.5246
43,467	6563	8.7	11.7791	14.1944	43,882	6698	8.3	20.2054	16.8550	44,429	6812	8.9	5.0417	4.9172
43,585	6566	8.8	13.1710	25.2125	43,879	6700	8.2	21.2709	15.9536	44,514	6816	9.1	9.1034	20.9194
43,417	6567	7.0	13.4974	8.8484	43,836	6711	8.4	25.5678	7.9842	44,489	6818	9.1	9.2621	16.1349
43,469	6569	9.2	14.5753	14.1020	<b>R.A. 16<sup>h</sup> 12<sup>m</sup></b>					44,516	6820	5.9	13.0405	21.7965
43,569	6573	8.9	16.4440	24.5102	44,000	6711	8.4	2.8159	7.9710	44,454	6821	9.0	13.3816	9.9697
43,470	6574	5.2	16.4715	14.0567	44,069	6713	9.1	4.0451	24.7824	44,535	6823	8.7	14.0798	23.4438
43,500	6577	9.2	18.0772	16.8373	43,980	6714	7.0	4.1164	4.3669	44,542	6824	8.7	14.1372	24.9432
43,403	6578	8.5	18.2972	6.9744	44,016	6715	9.3	4.1669	12.1471	44,544	6825	8.6	14.4730	24.6647
43,362	6581	9.0	19.9175	1.6426	44,071	6719	9.2	6.2997	24.8581	44,422	6828	8.6	17.1477	4.2269
<b>R.A. 15<sup>h</sup> 56<sup>m</sup></b>					44,057	6721	8.6	7.3549	22.9058	44,552	6830	9.2	17.7085	25.4492
43,624	6593	9.3	3.3746	3.2779	43,988	6725	8.4	8.8694	5.1787	44,409	6832	8.8	19.0327	0.8507
43,698	6596	8.8	4.4181	16.0960	43,989	6726	9.0	9.7776	5.3545	44,433	6833	7.2	19.4276	5.2494
43,743	6598	8.2	5.3948	20.7911	44,058	6729	7.0	10.5731	23.2716	44,521	6835	8.8	20.1698	20.9735
43,744	6599	8.1	5.4336	20.8355	44,049	6736	8.9	15.1950	19.4797	44,522	6839	9.3	21.8149	21.0495
43,660	6609	9.1	10.7643	9.1619	44,074	6738	7.1	16.5818	24.6934	44,436	6840	8.9	23.3860	4.6808
43,681	6612	9.0	10.9280	13.1458	44,005	6741	6.9	18.0745	8.0332	44,473	6841	7.4	23.3694	12.4568
43,722	6616	9.0	13.7984	19.0143	44,009	6743	8.8	18.8109	8.5839	<b>R.A. 16<sup>h</sup> 44<sup>m</sup></b>				
43,691	6618	8.6	14.2817	15.0784	44,060	6744	8.5	19.2613	22.6453	44,623	6840	8.9	0.5971	4.6920
43,755	6621	9.0	16.4160	21.6298	44,061	6745	8.0	19.3277	22.7823	44,667	6841	7.4	0.6685	12.4679
43,738	6623	7.2	16.6911	19.7564	43,970	6746	8.3	19.9164	3.0654	44,641	6844	8.6	3.9721	8.2872
43,605	6624	8.3	17.4058	0.9083	44,062	6749	8.2	20.4841	23.5336	44,776	6845	7.8	4.7029	24.0368
43,708	6626	8.5	18.4393	16.5915	43,996	6750	7.9	20.6639	6.4091	44,760	6848	8.7	7.0948	21.3537
43,703	6627	8.8	18.6668	15.9309	44,052	6753	8.7	22.3407	21.4121	44,699	6851	9.2	8.0172	15.3366
43,726	6629	8.0	19.1967	18.9003	43,984	6755	9.1	24.6307	4.9969	44,687	6855	8.3	9.2948	14.2017
43,667	6630	8.9	19.3186	10.9269	<b>R.A. 16<sup>h</sup> 20<sup>m</sup></b>					44,778	6856	8.6	9.8852	23.6650
43,672	6632	8.2	21.5402	11.6124	44,133	6755	9.1	1.8450	4.9944	44,603	6859	8.7	10.5587	0.1477
43,711	6633	9.1	21.5295	17.5270	44,149	6760	9.1	5.4071	7.2536	44,724	6860	9.0	10.5942	18.1413
43,788	6634	8.8	21.5452	25.3910	44,212	6762	5.0	8.0594	22.6490	44,725	6861	9.0	10.6178	18.1502
43,695	6636	9.2	21.8325	14.9420										
43,631	6637	6.8	22.3636	4.1985										



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.
<b>R.A. 16<sup>h</sup> 44<sup>m</sup> (continued)</b>					<b>R.A. 17<sup>h</sup> 0<sup>m</sup> (continued)</b>					<b>R.A. 17<sup>h</sup> 16<sup>m</sup> (continued)</b>				
44,678	6864	8.2	11.2942	13.9754	45,316	6976	9.0	13.4492	20.8058	45,937	7078	8.9	5.6929	18.4591
44,647	6866	7.9	12.0408	10.0169	45,258	6980	9.2	15.8698	17.4749	45,872	7079	7.5	6.2654	11.2052
44,612	6867	8.6	12.9168	2.0314	45,342	6981	8.8	15.9276	22.7386	45,754	7080	8.5	6.5750	1.0253
44,604	6869	9.0	13.9453	0.4458	45,191	6982	8.7	16.4958	12.3428	45,962	7082	8.7	7.2220	19.8926
44,663	6871	9.0	15.7317	11.5439	45,260	6983	8.8	16.4874	17.4159	45,890	7084	9.0	7.3991	12.8552
44,751	6872	8.5	15.9533	20.9863	45,109	6984	8.3	16.7088	5.8418	45,964	7085	8.1	7.4433	20.2043
44,671	6875	7.7	16.7231	13.1838	45,231	6985	7.8	17.4545	14.8467	45,002	7086	7.5	7.6544	23.5293
44,672	6881	8.8	19.6971	12.9322	45,218	6987	8.1	18.3012	13.8660	45,881	7087	8.5	7.7228	11.8814
44,705	6882	8.1	20.0515	15.2573	45,111	6988	8.4	18.3877	6.1218	45,864	7089	8.7	8.4406	9.6498
44,743	6884	9.0	20.6512	19.4616	45,097	6990	9.1	19.5686	4.6773	45,918	7090	6.9	9.3175	15.7345
44,786	6885	8.8	21.5657	25.2073	45,321	6991	9.1	19.7278	21.0354	45,756	7098	8.9	11.2686	0.2229
44,708	6888	9.0	23.9218	15.9242	45,088	6992	8.6	20.0639	3.9681	45,757	7099	9.2	11.3696	0.3736
44,694	6890	8.2	24.4675	14.8062	45,068	6993	8.1	20.4783	1.4749	45,847	7103	8.9	12.2932	7.6983
44,652	6891	8.1	24.6590	9.9209	45,304	6995	8.9	21.4727	19.5720	46,029	7108	8.9	13.5504	24.7002
44,639	6892	8.6	24.8780	7.9738	45,305	6996	8.1	22.1940	19.6293	45,849	7110	8.8	14.4487	7.5437
44,711	6894	9.0	25.6101	15.4670	45,080	6997	8.4	22.3866	2.5401	45,891	7112	8.8	14.7662	13.0628
<b>R.A. 16<sup>h</sup> 52<sup>m</sup></b>					45,203	6998	9.0	22.3844	12.4973	45,955	7114	8.0	14.9040	19.1754
44,928	6888	9.0	1.2604	15.9290	45,137	7000	9.0	23.8137	7.6214	45,771	7117	9.0	15.8578	2.0950
44,916	6890	8.2	1.7933	14.8047	45,264	7005	7.4	25.3532	16.7551	45,772	7120	8.9	16.7763	1.2492
44,871	6891	8.1	1.9293	9.9176	45,180	7006	8.9	25.6463	10.6302	45,932	7121	7.8	16.8892	17.2402
44,849	6892	8.6	2.1261	7.9682	45,361	7007	9.0	25.6743	24.1209	45,775	7126	8.4	20.0550	1.4898
44,930	6894	9.0	2.9432	15.4523	<b>R.A. 17<sup>h</sup> 8<sup>m</sup></b>					45,868	7127	8.8	20.4075	10.0622
44,872	6900	7.4	5.2098	9.6747	45,501	7000	9.0	1.0578	7.6278	45,829	7129	6.3	20.8634	5.2494
44,939	6902	8.7	5.7433	16.3611	45,612	7005	7.4	2.7010	16.7434	45,869	7131	8.8	21.5220	10.2142
44,940	6903	8.4	5.9864	17.3253	45,540	7006	8.9	2.9245	10.6159	46,035	7134	8.7	22.1640	25.2055
45,000	6905	8.4	6.6979	24.3062	45,690	7007	9.0	3.1058	24.1044	45,854	7135	9.0	22.5728	8.2086
44,805	6907	8.4	9.5033	0.6790	45,620	7008	9.1	3.1656	17.6345	45,805	7137	8.3	22.9655	3.3114
44,954	6910	7.0	10.7072	17.5811	45,520	7010	9.0	3.9928	8.5715	45,983	7138	8.4	23.1168	20.8249
44,987	6911	9.0	11.7993	21.7505	45,560	7011	9.0	4.6173	12.8346	45,921	7143	8.7	24.1032	15.4920
44,811	6913	9.1	12.5606	1.3110	45,417	7014	9.3	5.2223	1.4132	45,948	7146	9.1	25.7320	18.1906
44,983	6915	8.3	13.0085	20.6186	45,531	7017	9.0	5.6135	9.9981	<b>R.A. 17<sup>h</sup> 24<sup>m</sup></b>				
44,910	6919	9.0	14.0264	13.8783	45,486	7021	9.0	5.9805	6.6161	46,287	7138	8.4	0.5110	20.8388
44,826	6921	8.7	15.0515	3.5385	45,446	7023	8.5	6.4812	3.6376	46,251	7143	8.7	1.4368	15.4946
44,933	6922	8.5	15.1337	16.0002	45,541	7026	9.0	6.5540	10.4169	46,265	7146	9.1	3.0961	18.1742
45,006	6924	8.9	15.4636	24.7767	45,653	7027	9.0	8.9301	20.9153	46,312	7150	9.0	4.2007	23.8265
44,934	6926	8.7	16.9599	16.3171	45,476	7028	8.2	9.0032	6.0990	46,216	7151	9.0	4.9572	11.8781
44,997	6927	9.2	17.2076	23.0575	45,422	7029	8.8	9.1670	1.1850	46,152	7154	8.3	6.5322	4.1165
44,867	6928	8.6	17.4423	8.4298	45,477	7031	8.8	9.6647	6.2094	46,246	7155	8.5	6.8340	14.6560
44,818	6931	6.2	18.4655	2.1185	45,577	7033	8.8	10.6025	13.6671	46,146	7160	8.5	9.4033	3.5682
44,854	6934	9.0	19.6899	7.4502	45,524	7036	8.8	11.6752	8.4713	46,185	7163	9.0	11.2497	7.9966
44,813	6936	8.3	19.8876	1.7740	45,664	7037	9.0	11.7552	22.7058	46,186	7164	8.8	11.8061	7.9956
44,899	6937	8.3	19.9457	13.2338	45,478	7038	8.4	12.3496	6.0056	46,268	7165	8.0	12.5095	17.7165
44,887	6943	8.4	23.1041	10.4860	45,627	7039	9.1	12.3653	18.1495	46,279	7167	8.7	15.0958	18.7599
44,876	6946	6.0	24.3740	9.8971	45,543	7040	8.1	12.4801	11.2991	46,235	7168	8.2	15.2503	13.4286
44,913	6949	9.0	24.9012	13.7909	45,434	7042	8.2	13.2177	2.2015	46,109	7175	8.8	17.6856	1.0373
<b>R.A. 17<sup>h</sup> 0<sup>m</sup></b>					45,591	7043	9.0	13.7284	14.7724	46,262	7182	8.9	22.4945	16.6899
45,165	6943	8.4	0.3808	10.5000	45,492	7045	8.9	14.7100	6.3348	46,112	7185	8.8	22.9396	0.6757
45,153	6946	6.0	1.6440	9.8971	45,665	7047	8.4	15.7810	21.9746	46,162	7188	7.8	23.2515	4.2438
45,207	6949	9.0	2.2154	13.7846	45,629	7050	8.9	16.1655	18.1209	46,239	7189	9.0	23.5313	13.8729
45,363	6952	8.2	5.6755	24.9865	45,427	7054	8.5	18.3746	1.8092	46,307	7190	8.9	23.7860	23.1962
45,247	6953	7.9	5.7637	17.1861	45,557	7057	9.1	19.6308	12.1090	46,329	7191	8.8	24.1127	26.0194
45,353	6954	8.6	6.0816	24.3283	45,607	7059	9.0	19.9932	16.5295	46,240	7194	8.2	25.0805	14.2970
45,249	6957	9.0	6.5515	16.8440	45,608	7060	8.2	20.3417	15.7103	46,209	7195	9.1	25.5685	9.5292
45,169	6959	8.6	6.6851	10.4322	45,484	7061	9.0	20.6538	5.8332	46,320	7196	8.8	25.5845	25.4506
45,116	6965	9.1	8.7436	7.1886	45,428	7062	8.6	21.2213	1.3135	<b>R.A. 17<sup>h</sup> 32<sup>m</sup></b>				
45,053	6966	8.3	9.0715	0.9862	45,565	7065	8.8	23.0474	13.0963	46,450	7188	7.8	0.4573	4.2563
45,093	6969	8.5	9.7553	5.0542	<b>R.A. 17<sup>h</sup> 16<sup>m</sup></b>					46,585	7189	9.0	0.8465	13.8821
45,368	6972	8.1	11.1782	25.6382	45,888	7065	8.8	0.3538	13.1111	46,668	7190	8.9	1.2072	23.2022
45,054	6975	8.3	12.9424	0.7461	45,907	7073	8.9	4.3590	14.7628					



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
<b>R.A. 17<sup>h</sup> 32<sup>m</sup> (continued)</b>					<b>R.A. 17<sup>h</sup> 48<sup>m</sup> (continued)</b>					<b>R.A. 17<sup>h</sup> 56<sup>m</sup> (continued)</b>				
46,706	7191	8.8	1.5660	26.0212	47,217	7314	8.5	6.6960	9.3805	47,928	7406	9.0	10.9506	21.2906
46,586	7194	8.2	2.4005	14.2886	47,473	7315	8.4	6.8204	21.9953	47,800	7410	7.5	12.9324	14.2470
46,530	7195	9.1	2.8342	9.5158	47,447	7317	6.9	7.0495	18.9625	47,930	7411	9.3	13.0579	21.1817
46,694	7196	8.8	3.0312	25.4349	47,514	7321	8.2	8.0049	25.6359	47,570	7418	9.0	16.2779	1.8654
46,600	7197	9.1	3.3129	14.8450	47,474	7323	9.0	8.2498	22.1517	47,557	7423	8.8	16.7939	0.7368
46,404	7198	7.0	3.6178	2.8483	47,546	7324	7.5	8.5481	14.1457	47,574	7427	8.8	18.2511	1.5721
46,432	7201	8.9	4.6473	3.2353	47,118	7326	7.7	8.8429	1.7818	47,769	7428	9.0	18.3456	11.6013
46,452	7202	9.1	4.9659	4.1320	47,416	7327	9.1	9.4770	17.2692	47,634	7429	8.8	18.4752	4.6667
46,434	7205	8.5	5.8282	3.1535	47,239	7332	8.3	11.5270	11.2373	47,839	7430	8.8	18.5439	15.6578
46,670	7207	8.6	6.3225	22.9854	47,489	7334	8.0	12.5955	23.3788	47,688	7432	8.6	18.8792	7.4453
46,494	7212	8.9	7.5725	7.9189	47,168	7335	8.9	14.1508	6.3114	47,865	7433	8.6	18.9559	18.5495
46,699	7217	8.2	9.2921	25.1519	47,440	7336	8.9	14.2156	18.1625	47,905	7434	9.1	18.9982	20.4796
46,414	7220	8.6	10.4574	2.4487	47,301	7338	9.0	14.7931	12.6095	47,975	7436	8.4	19.0610	22.7630
46,563	7221	7.3	10.6054	12.1301	47,155	7341	8.3	16.5427	4.2793	47,807	7444	8.7	21.2345	13.5622
46,702	7224	9.0	11.8909	24.9105	47,403	7342	8.6	17.0713	16.2939	47,854	7446	9.0	22.2254	17.5155
46,685	7231	7.8	13.6103	23.9730	47,480	7344	9.0	17.9857	22.6378	47,913	7447	8.9	22.2851	20.1082
46,419	7236	8.8	15.5873	2.4487	47,145	7345	8.9	18.0967	3.2348	47,960	7450	7.2	23.2569	22.1543
46,648	7237	8.5	15.6889	18.7594	47,305	7346	9.0	18.6441	12.9470	48,008	7451	9.1	23.4787	24.7314
46,473	7239	8.7	17.1076	5.2555	47,241	7347	6.2	18.7762	10.4219	47,937	7453	8.7	24.3298	21.6375
46,421	7241	8.7	19.8465	3.1062	47,353	7349	9.1	19.5728	13.4975	47,887	7454	8.8	24.3576	18.6580
46,398	7243	8.6	21.2220	1.3835	47,173	7355	9.0	21.2818	6.8037	48,010	7455	8.9	24.4213	24.5654
46,689	7245	8.5	21.5269	24.0822	47,425	7356	8.7	21.4824	16.8580	47,918	7460	8.9	25.4128	19.8293
46,649	7246	9.1	22.0843	18.7701	47,280	7357	9.1	21.7165	12.2949	<b>R.A. 18<sup>h</sup> 4<sup>m</sup></b>				
46,399	7248	9.0	22.3655	2.1589	47,150	7359	8.9	22.8354	3.2894	49,042	7450	7.2	0.6663	22.1665
46,642	7249	8.2	22.6026	17.8677	47,127	7360	8.6	22.9983	1.5777	49,130	7451	9.1	0.9173	24.7411
46,507	7250	8.7	22.8024	8.0827	47,505	7361	8.2	22.9325	24.2519	49,045	7453	8.7	1.7333	21.6371
46,610	7253	9.1	24.0298	15.5266	47,208	7362	8.8	23.1914	9.0572	48,947	7454	8.8	1.7272	18.6575
46,632	7257	8.8	25.7280	17.2683	47,495	7363	8.3	23.2812	23.5483	49,132	7455	8.9	1.8580	24.5639
<b>R.A. 17<sup>h</sup> 40<sup>m</sup></b>					47,396	7366	9.2	23.5862	14.5573	48,981	7460	8.9	2.7956	19.8164
46,950	7253	9.1	1.3638	15.5300	47,444	7367	8.9	23.8509	18.2812	48,647	7463	8.7	3.4291	13.9377
46,966	7257	8.8	3.0816	17.2522	47,151	7371	9.3	25.1867	3.9874	48,589	7467	7.3	3.9860	12.9400
47,054	7258	8.3	3.4247	25.6834	47,412	7372	8.7	25.1350	16.1544	48,458	7469	9.0	4.2899	10.8366
46,827	7260	8.9	3.6998	5.8877	47,138	7373	8.7	25.5792	2.9768	48,894	7470	8.9	4.6099	17.6908
47,030	7261	8.8	3.9044	23.3168	47,414	7374	8.9	25.5162	15.6730	48,093	7479	9.1	6.8028	1.4607
46,972	7263	8.7	5.2089	18.5277	<b>R.A. 17<sup>h</sup> 56<sup>m</sup></b>					48,460	7481	8.6	8.2107	10.5849
46,799	7264	8.8	5.3973	4.0666	47,559	7360	8.6	0.1738	1.5969	48,592	7482	9.0	8.6330	12.3338
46,993	7266	9.1	6.8095	19.9989	47,983	7361	8.2	0.3656	24.2681	49,107	7484	9.0	8.7593	24.5171
46,930	7269	8.8	7.2855	12.9384	47,693	7362	8.8	0.4518	9.0703	49,108	7485	8.7	8.8359	23.5926
46,859	7276	8.6	10.3535	8.3644	47,984	7363	8.3	0.7064	23.5602	48,063	7492	8.7	10.0948	0.8368
46,842	7280	9.1	12.6652	6.9248	47,813	7366	9.2	0.9093	14.5659	49,109	7495	8.1	10.6004	23.6821
47,048	7288	9.0	15.1753	24.5026	47,859	7367	8.9	1.2162	18.2867	49,112	7497	9.1	10.8094	23.8655
46,770	7293	7.3	17.5701	1.8342	47,597	7371	9.3	2.3894	3.9789	49,048	7498	8.9	11.1442	21.8714
46,924	7296	8.9	18.2766	11.7256	47,829	7372	8.7	2.4760	16.1451	49,167	7500	8.4	11.4958	25.6083
46,806	7299	9.0	19.4229	4.0684	47,581	7373	8.7	2.7705	2.9639	48,907	7502	8.8	12.1660	17.4823
46,946	7300	9.1	19.6391	14.4408	47,830	7374	8.9	2.8517	15.6594	48,379	7507	9.5	14.2406	9.1287
47,001	7301	9.0	20.0208	20.2292	47,715	7376	8.6	4.0577	9.9478	48,168	7508	8.7	14.2844	3.5525
47,025	7302	8.3	20.8205	21.9567	47,892	7379	9.2	4.7854	19.8614	48,425	7511	8.6	15.0022	9.6220
46,914	7303	9.3	20.8642	11.3196	48,032	7380	8.0	4.8928	25.6455	48,734	7512	8.9	15.0986	15.2298
47,050	7305	7.5	23.3042	24.8496	47,878	7381	8.6	5.5115	19.3836	48,847	7513	9.0	15.1026	16.8162
47,051	7306	7.3	23.3309	24.7124	47,599	7383	8.3	5.9758	3.3813	48,071	7515	8.9	15.4441	0.2454
47,037	7307	8.8	24.0961	23.5265	47,681	7386	8.8	6.8936	7.5520	48,535	7517	9.1	15.9359	11.6675
<b>R.A. 17<sup>h</sup> 48<sup>m</sup></b>					47,745	7387	8.9	7.1681	10.8074	48,350	7519	8.1	16.3440	7.8018
47,508	7305	7.5	0.7441	24.8613	47,833	7392	7.6	8.7849	15.7037	49,085	7521	7.2	16.7230	23.3424
47,509	7306	7.3	0.7686	24.7236	47,682	7393	8.1	9.0432	7.8817	48,958	7522	8.7	16.9999	18.5165
47,487	7307	8.8	1.5210	23.5287	47,924	7394	8.6	9.5248	21.4599	48,674	7524	8.9	18.3251	13.7951
47,265	7309	8.3	3.6838	11.6216	47,603	7395	8.8	9.7083	3.2996	48,675	7528	8.8	18.6800	13.9554
47,166	7313	9.1	5.5915	6.9898	47,991	7397	8.8	9.8599	24.3533	48,435	7529	9.1	18.8191	9.3484
					47,992	7398	8.8	9.9141	23.8357	48,307	7531	9.2	19.6240	6.4471
					47,967	7402	8.6	10.5728	23.4154	48,924	7532	7.5	19.6068	18.4770
					47,993	7404	8.2	10.6776	24.5382	48,552	7533	9.0	20.4173	11.6286
					47,589	7405	8.1	10.7256	2.1590	48,258	7535	8.9	20.6875	6.0671



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.
<b>R.A. 18<sup>h</sup> 4<sup>m</sup> (continued)</b>					<b>R.A. 18<sup>h</sup> 12<sup>m</sup> (continued)</b>					<b>R.A. 18<sup>h</sup> 28<sup>m</sup> (continued)</b>				
48,928	7537	9.1	20.8337	18.2431	50,501	7635	8.6	20.2133	23.6416	51,138	7738	8.3	5.9820	4.9913
49,060	7539	8.0	21.5051	22.2523	50,528	7637	8.9	21.2825	24.7154	51,160	7739	6.5	6.1111	6.6653
48,797	7540	9.0	21.8367	16.1398	50,402	7638	8.2	21.7699	21.4341	51,263	7741	8.6	6.5877	14.9045
48,221	7541	9.0	22.1027	5.0605	49,982	7642	6.0	22.9357	11.8786	51,269	7742	9.3	6.9383	14.9273
48,934	7546	9.6	22.8248	17.8681	50,270	7643	8.6	22.9853	16.8155	51,229	7745	9.0	7.5826	12.8581
48,872	7547	8.8	23.4312	16.8401	49,666	7645	8.7	23.5340	6.7031	51,331	7749	8.6	8.2100	17.1615
48,499	7548	9.2	23.6083	10.8532	49,733	7646	8.7	23.8435	7.8000	51,367	7753	8.4	8.9659	19.2897
48,278	7551	8.2	23.7769	6.0009	49,255	7647	8.8	24.0695	0.3448	51,149	7754	9.2	9.0061	6.1304
48,633	7553	8.8	24.2538	13.2244	<b>R.A. 18<sup>h</sup> 20<sup>m</sup></b>					51,246	7755	7.6	9.0327	13.5373
48,506	7555	9.3	24.7307	10.5290	50,761	7642	6.0	0.2282	11.8946	51,150	7759	7.7	11.0414	6.2978
48,812	7556	9.3	24.9509	15.7416	50,844	7643	8.6	0.3339	16.8309	51,443	7764	9.0	12.1547	24.0264
<b>R.A. 18<sup>h</sup> 12<sup>m</sup></b>					50,701	7645	8.7	0.7677	6.7125	51,381	7768	9.3	13.2031	19.6485
50,235	7547	8.8	0.7801	16.8504	50,711	7646	8.7	1.0897	7.8060	51,432	7772	7.2	14.4072	23.3263
49,864	7548	9.2	0.8892	10.8617	50,602	7647	8.8	1.2309	0.3485	51,151	7773	8.8	14.7946	5.5932
49,519	7551	8.2	1.0026	6.0077	50,737	7659	8.9	4.2228	10.2218	51,382	7775	8.9	16.0315	20.3170
49,988	7553	8.8	1.5617	13.2255	50,816	7660	9.0	4.2614	15.5657	51,336	7781	6.8	17.2295	17.1639
49,869	7555	9.3	2.0079	10.5249	50,949	7661	8.7	4.4991	22.7845	51,371	7784	8.9	17.5220	18.6351
50,187	7556	9.3	2.2873	15.7344	50,924	7665	9.1	5.4331	22.0471	51,178	7785	8.2	17.9637	8.5643
49,997	7558	9.5	3.1648	12.5045	50,864	7671	7.5	7.7767	18.3489	51,383	7786	8.3	18.4637	20.6037
49,379	7559	8.5	3.2258	3.1648	50,895	7672	8.1	8.0330	20.5450	51,448	7787	8.7	19.5295	24.0569
49,205	7561	9.1	3.2175	0.7883	50,952	7675	8.2	8.3814	23.3127	51,339	7788	9.4	19.6476	17.4180
49,443	7562	8.9	3.3147	4.6412	50,644	7676	8.9	8.7095	2.7403	51,407	7789	8.8	20.3928	21.5387
50,078	7564	8.2	3.5845	14.0376	50,931	7678	8.0	9.3854	22.4283	51,204	7790	8.2	20.5875	11.4332
49,878	7567	8.2	4.0912	10.7619	50,607	7679	9.2	9.4114	0.6297	51,341	7795	9.0	21.7022	17.1927
50,199	7568	9.3	4.4667	16.1047	50,671	7680	9.0	9.7282	5.0029	51,313	7796	8.3	21.7320	15.6831
50,201	7571	9.0	4.8448	15.8602	50,741	7681	9.0	9.7404	10.4716	51,437	7797	8.9	21.9670	23.3482
49,676	7572	8.1	4.8627	7.9584	50,715	7683	7.9	10.5271	8.1037	51,315	7798	7.2	22.1356	16.5290
50,011	7575	8.0	5.6002	13.2847	50,672	7684	8.7	10.8664	4.9747	51,110	7799	9.1	22.3042	1.1310
50,489	7576	8.0	5.7582	24.6047	50,802	7686	8.9	11.2378	14.3081	51,374	7803	8.3	23.0708	19.1209
49,527	7578	8.7	6.1585	5.6637	50,716	7690	8.8	13.9327	8.1451	51,410	7809	8.5	24.1883	21.2702
49,824	7579	6.5	6.2818	9.3158	50,646	7692	8.5	14.6903	2.7237	51,165	7812	8.6	25.7525	6.6645
50,327	7580	8.6	6.5462	19.1299	50,724	7696	8.6	16.1032	9.0760	<b>R.A. 18<sup>h</sup> 36<sup>m</sup></b>				
50,455	7581	8.9	6.7967	23.4437	50,725	7697	9.5	16.1403	8.6356	51,762	7803	8.3	0.4450	19.1355
50,020	7582	9.2	7.0051	12.3163	50,692	7698	9.1	16.1700	5.7519	51,804	7809	8.5	1.5875	21.2715
49,384	7583	9.5	7.2262	3.6901	50,717	7699	8.7	16.2794	7.6275	51,593	7812	8.6	2.9856	6.6495
49,611	7584	8.9	7.4489	6.5870	50,787	7700	8.3	16.7275	13.1552	51,780	7813	8.9	3.8824	20.4679
49,449	7585	8.0	7.5114	4.2740	50,693	7702	8.7	17.0578	6.2105	51,658	7814	9.3	4.0148	11.4558
49,897	7587	8.6	8.2273	10.9794	50,969	7704	8.9	18.5338	25.0361	51,702	7817	8.4	4.5026	15.3243
50,031	7588	8.7	8.8559	13.0706	50,809	7706	8.9	18.9083	14.5768	51,632	7823	8.9	6.2296	10.1351
49,902	7590	8.6	9.4447	11.0769	50,884	7713	8.6	19.4502	19.2392	51,811	7835	9.0	10.6641	20.6865
49,696	7591	9.0	10.0179	8.0104	50,901	7714	8.5	19.6720	19.8360	51,832	7836	9.1	11.0320	21.6665
49,222	7592	8.6	10.2796	0.7185	50,718	7719	8.9	21.3183	7.8530	51,785	7837	8.9	11.0894	19.6718
50,037	7593	7.8	10.4136	13.0274	50,840	7720	8.9	21.4650	16.7266	51,650	7838	9.1	12.2385	10.7991
50,108	7594	8.2	10.4526	14.3209	50,791	7721	8.6	21.8293	13.3195	51,519	7839	8.8	12.3326	1.9752
50,332	7596	8.3	11.6889	19.2703	50,810	7722	8.5	22.0594	14.5020	51,676	7840	9.3	12.3902	13.1714
49,627	7598	7.5	11.8885	6.9854	50,918	7725	8.7	23.7245	21.0719	51,749	7841	9.2	12.9104	18.2134
50,394	7600	8.2	12.2864	21.4988	50,906	7727	8.9	24.2972	19.9165	51,923	7843	9.0	13.0244	25.7141
49,848	7605	8.5	13.2737	9.8687	50,751	7728	6.9	25.2662	10.5419	51,706	7844	8.8	13.2186	15.3950
50,161	7606	8.9	13.3868	14.8847	50,874	7729	8.8	25.6383	18.2400	51,837	7848	9.3	14.2927	22.2036
49,918	7607	9.0	13.4970	10.5911	<b>R.A. 18<sup>h</sup> 28<sup>m</sup></b>					51,509	7851	9.2	14.6913	0.3735
49,636	7610	8.0	14.4542	7.1593	51,392	7725	8.7	1.1216	21.0788	51,751	7853	6.4	15.9027	17.5653
49,785	7613	7.7	15.4122	8.8966	51,376	7727	8.9	1.6811	19.9167	51,561	7856	8.8	16.7458	4.0932
49,786	7614	8.6	15.4573	8.8614	51,197	7728	6.9	2.5434	10.5317	51,737	7858	9.0	17.0040	16.8988
49,479	7616	9.0	15.6396	4.9687	51,349	7729	8.8	3.0030	18.2247	51,901	7863	8.5	18.6841	24.8941
49,409	7617	8.3	15.6486	3.5298	51,224	7733	9.8	4.8585	12.3869	51,590	7864	9.2	18.9038	6.3106
50,338	7619	9.0	16.1095	18.9493	51,225	7734	7.5	5.7677	12.6754	51,739	7865	9.3	19.1277	16.9840
49,721	7620	8.0	16.2264	7.5712	51,291	7737	8.3	5.9493	15.7469	51,652	7866	8.8	19.2770	11.3598
49,416	7623	9.0	17.5473	4.1188						51,754	7867	7.1	19.3730	18.0249
49,650	7627	9.1	18.3989	7.0710						51,755	7870	9.0	20.9393	18.1239
50,368	7629	9.0	19.1060	19.5681						51,548	7875	9.0	22.0873	3.3508
49,795	7634	9.0	19.8940	8.6176										



Reference No. Mag. Standard co-ordinates, 1900-0.					Reference No. Mag. Standard co-ordinates, 1900-0.					Reference No. Mag. Standard co-ordinates, 1900-0.				
Hyd.	Algiers.	ξ'.	η'.		Hyd.	Algiers.	ξ'.	η'.		Hyd.	Algiers.	ξ'.	η'.	
<b>R.A. 18<sup>h</sup> 36<sup>m</sup> (continued)</b>					<b>R.A. 18<sup>h</sup> 52<sup>m</sup> (continued)</b>					<b>R.A. 19<sup>h</sup> 0<sup>m</sup> (continued)</b>				
51,604	7880	8.3	24.4841	6.6408	52,558	7980	9.2	4.2034	24.8729	52,908	8100	8.8	19.5699	22.2301
51,709	7881	8.2	24.4814	15.2630	52,498	7982	8.0	4.8749	22.1760	52,847	8101	6.2	19.7967	18.3782
51,819	7883	6.7	24.6179	21.5639	52,414	7986	9.0	5.7640	14.2575	52,789	8105	7.3	21.1477	14.3441
<b>R.A. 18<sup>h</sup> 44<sup>m</sup></b>					52,487	7988	9.1	6.0195	20.8210	52,966	8108	8.5	21.4100	24.6904
52,016	7880	8.3	1.7171	6.6397	52,354	7992	8.8	7.2555	8.9377	52,747	8109	7.4	21.8083	11.1060
52,100	7881	8.2	1.8124	15.2613	52,263	7993	8.6	7.4514	1.4649	52,718	8112	8.7	22.4113	8.7920
52,132	7883	6.7	2.0205	21.5602	52,381	7994	7.2	8.3983	11.0530	52,885	8114	8.8	23.2611	19.8754
52,089	7888	9.2	4.1138	14.2396	52,382	7995	8.9	8.6655	11.4070	52,763	8116	9.1	23.5909	11.6412
52,059	7894	8.6	6.4395	11.3474	52,524	7996	9.4	9.3349	23.1089	52,804	8117	9.1	23.5978	14.6064
52,179	7895	8.9	6.5957	24.6916	52,539	7997	9.0	9.4893	24.2529	52,748	8121	9.2	24.0830	11.1258
52,051	7897	9.0	7.1014	9.5443	52,501	7998	8.4	9.5171	22.1347	52,952	8122	6.7	24.0146	24.5688
51,989	7900	7.8	7.6706	5.0567	52,344	8002	9.2	12.1340	7.6398	<b>R.A. 19<sup>h</sup> 8<sup>m</sup></b>				
52,034	7902	8.9	7.9618	7.3961	52,436	8003	7.3	12.1963	16.4202	53,287	8114	8.8	0.6446	19.8877
52,112	7903	6.8	8.2858	16.7037	52,525	8006	8.5	12.7281	23.0824	53,173	8116	9.1	0.8807	11.6498
52,145	7905	8.9	9.0986	22.5519	52,540	8007	9.2	12.9812	24.4618	53,202	8117	9.1	0.9214	14.6148
52,061	7906	8.6	9.7536	10.7273	52,267	8012	9.1	14.3502	1.7711	53,155	8121	9.2	1.3670	11.1289
52,053	7907	7.2	9.8630	9.5460	52,438	8013	8.7	14.7327	16.7191	53,338	8122	6.7	1.4514	24.5719
52,054	7909	8.1	10.0255	9.9135	52,356	8014	8.3	14.7456	8.9809	53,324	8124	9.2	3.1935	22.8989
52,071	7910	8.6	11.6219	11.5882	52,489	8015	9.4	14.7421	21.6880	53,289	8128	9.2	4.0084	19.8915
52,005	7911	8.7	11.7374	5.7364	52,269	8018	8.7	15.8661	1.8960	53,325	8133	9.4	5.4449	23.1873
52,019	7912	8.7	11.7967	7.3050	52,457	8022	7.4	17.2830	17.9785	53,081	8136	9.2	5.7374	6.2859
52,094	7913	9.0	11.9078	14.4460	52,359	8023	6.8	17.5306	9.4268	53,082	8138	9.2	6.6221	5.5146
52,107	7914	7.2	12.1720	16.0599	52,256	8025	8.4	17.6900	1.1958	53,242	8139	8.6	7.0218	17.2595
52,084	7915	8.3	12.1870	13.2502	52,508	8026	9.1	17.8084	22.6033	53,327	8141	9.2	7.4853	23.2744
51,981	7918	8.9	12.9948	3.4424	52,349	8028	8.3	18.6409	7.8688	53,328	8149	9.3	9.4812	23.1286
52,160	7919	9.2	13.0851	23.1970	52,459	8029	9.0	19.0350	18.2948	53,260	8151	8.5	9.8316	17.7886
52,127	7920	9.8	13.2934	20.4813	52,270	8032	8.9	19.7461	1.8632	53,300	8153	8.9	10.7336	20.8610
52,037	7921	8.6	13.5333	7.5937	52,567	8033	8.9	20.0833	25.2712	53,185	8155	8.9	11.7351	13.2781
51,960	7922	8.7	13.6975	1.6218	52,509	8034	7.7	20.6265	22.5768	53,186	8163	9.2	13.1683	13.3740
52,095	7923	8.7	14.1326	14.0163	52,569	8036	9.1	20.9639	24.9380	53,016	8166	8.2	14.5936	1.8597
52,117	7924	8.9	14.6746	17.9681	52,571	8038	8.8	21.9782	25.3353	53,052	8169	8.8	15.0821	3.7693
52,146	7927	9.4	15.2394	22.2716	52,473	8039	8.1	22.0409	18.8762	53,211	8171	8.8	15.5166	14.7769
52,113	7929	9.0	15.3652	16.9855	52,543	8041	8.9	23.4621	24.5789	53,134	8175	9.1	15.8316	9.1799
52,147	7934	8.4	16.4595	21.7842	52,331	8045	9.1	25.2422	7.2676	53,348	8178	8.0	17.3671	24.5204
51,972	7936	9.2	16.8239	2.4943	52,363	8046	9.0	25.2714	9.3048	53,279	8179	9.0	17.6619	19.4928
52,149	7938	8.4	17.5137	22.0672	<b>R.A. 19<sup>h</sup> 0<sup>m</sup></b>					53,165	8184	8.5	19.5973	10.9528
52,041	7944	9.0	19.0071	7.7878	52,955	8041	8.9	0.8990	24.5888	53,165	8187	9.9	20.8635	19.4178
52,150	7956	9.0	21.6203	22.4853	52,708	8045	9.1	2.4822	7.2582	53,281	8188	Var.	20.9950	18.8176
52,108	7957	8.7	21.7051	15.8936	52,724	8046	9.0	2.5346	9.2946	53,282	8188	Var.	20.9950	18.8176
52,013	7958	7.0	21.7971	5.5725	52,646	8047	9.1	3.4093	4.0715	53,228	8194	9.3	21.7722	15.8659
52,057	7959	6.9	22.2304	10.1080	52,939	8050	9.1	4.6428	24.3865	53,214	8198	8.9	22.3836	14.9796
52,173	7962	9.0	22.6088	23.8925	52,838	8052	6.7	5.0311	17.6960	53,180	8201	8.8	23.0148	12.3350
52,075	7963	8.8	22.8787	11.9160	52,872	8053	9.1	5.0648	20.3383	53,151	8202	8.5	23.2423	10.1306
52,161	7964	9.4	23.0294	23.5023	52,809	8054	7.3	5.1975	15.9838	53,231	8203	8.6	23.3847	15.8897
52,030	7965	9.1	23.3389	7.1931	52,890	8057	8.9	6.0642	20.9439	53,008	8205	8.6	23.6114	1.0255
52,131	7967	8.5	23.5607	19.9087	52,649	8058	9.0	6.1285	3.5720	53,197	8206	5.0	23.7264	14.6004
52,174	7969	7.3	24.0065	24.0651	52,767	8060	8.3	6.4544	12.4251	53,024	8207	8.3	23.8595	2.2109
52,197	7970	9.2	24.1100	25.9957	52,740	8072	8.8	10.0020	11.2750	53,039	8209	8.7	24.2516	3.4330
52,184	7975	8.9	25.3666	25.7203	52,607	8073	8.8	10.0337	0.4054	53,358	8211	8.9	24.3948	25.6481
<b>R.A. 18<sup>h</sup> 52<sup>m</sup></b>					52,921	8076	8.9	11.0188	23.0474	53,295	8212	9.0	24.5060	20.2428
52,514	7964	9.4	0.4540	23.5172	52,696	8077	8.9	11.2881	6.3638	53,253	8213	8.8	24.9032	16.8643
52,319	7965	9.1	0.5782	7.2047	52,651	8078	9.0	12.2478	4.1016	53,096	8214	8.6	25.3107	5.6882
52,475	7967	8.5	0.9445	19.9176	52,893	8080	8.8	13.2180	20.5933	53,285	8216	8.5	25.6565	19.5343
52,531	7969	7.3	1.4376	24.0685	52,667	8081	8.4	13.5829	4.8030	<b>R.A. 19<sup>h</sup> 16<sup>m</sup></b>				
52,576	7970	9.2	1.5630	25.9976	52,623	8084	9.0	15.9801	1.9749	53,622	8201	8.8	0.3125	12.3502
52,548	7975	8.9	2.8164	25.7072	52,756	8087	7.0	16.6488	11.7023	53,574	8202	8.5	0.5150	10.1432
52,550	7977	9.1	3.3904	25.6751	52,927	8089	8.9	16.9058	22.9407	53,705	8203	8.6	0.7228	15.9005
52,497	7978	9.1	4.0646	22.3194	52,609	8090	8.6	17.0790	1.1260	53,401	8205	8.6	0.7807	1.0341
					52,624	8092	8.8	17.2900	1.2224	53,689	8206	5.0	1.0498	14.6073
					52,858	8093	8.8	17.9261	19.3822					
					52,757	8094	9.2	18.0423	11.5991					



Reference No.					Reference No.					Reference No.				
Mag.		Standard co-ordinates, 1900-0.			Mag.		Standard co-ordinates, 1900-0.			Mag.		Standard co-ordinates, 1900-0.		
Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.	
R.A. 19 <sup>h</sup> 16 <sup>m</sup> (continued)					R.A. 19 <sup>h</sup> 24 <sup>m</sup> (continued)					R.A. 19 <sup>h</sup> 40 <sup>m</sup>				
53,413	8207	8.3	1.0422	2.2168	54,017	8327	8.9	9.5070	1.4696	55,203	8436	9.0	0.6954	24.2068
53,457	8209	8.7	1.4481	3.4347	54,324	8328	9.1	9.8812	24.1401	55,034	8440	9.2	2.1552	8.0847
53,937	8211	8.9	1.8439	25.6468	54,035	8330	9.0	10.9506	4.2543	54,973	8441	9.2	2.5318	3.6736
53,805	8212	9.0	1.8936	20.2405	54,325	8332	9.0	11.1329	24.250	55,064	8443	8.9	3.4699	10.1193
53,731	8213	8.8	2.2523	16.8574	54,036	8333	9.0	11.4390	3.4060	55,013	8447	8.9	4.6171	6.2278
53,490	8214	8.6	2.5328	5.6780	54,172	8334	8.8	11.8639	13.7293	55,065	8448	9.2	4.9044	10.1772
53,787	8216	8.5	3.0359	19.5186	54,225	8335	9.2	12.3541	18.5879	55,135	8450	8.5	5.5731	17.1915
53,559	8217	8.7	3.0852	8.7321	54,281	8337	8.7	12.4967	21.3645	55,136	8453	9.1	6.5674	16.1992
53,623	8218	8.0	3.5013	11.5505	54,039	8338	9.1	12.7977	3.8438	55,068	8460	8.8	10.0974	10.1811
53,709	8219	9.1	3.5316	16.0351	54,052	8339	9.0	12.8500	4.4309	55,002	8462	8.8	10.8059	5.6802
53,625	8220	8.5	4.1702	12.0261	54,293	8340	8.6	13.5252	22.1263	55,106	8464	8.9	11.6043	14.1238
53,913	8223	9.0	4.3410	23.8666	54,264	8343	8.3	13.8578	20.1117	54,992	8467	9.0	14.4767	4.2424
53,432	8224	8.7	4.9354	2.3274	54,077	8344	8.2	13.9505	6.3957	55,226	8468	5.1	14.4915	25.0211
53,789	8234	8.2	7.6848	19.6097	54,123	8347	9.0	14.4884	10.3219	55,004	8471	8.8	14.8481	5.7365
53,671	8238	8.7	9.0006	13.5770	54,066	8348	8.8	15.1432	6.1986	55,152	8472	9.3	14.8393	17.3482
53,692	8239	9.0	9.1290	15.1755	54,079	8349	8.0	15.4774	7.3806	55,237	8474	9.1	15.2996	26.0026
53,711	8243	9.1	10.0897	15.9619	54,268	8359	7.8	18.2402	20.1677	55,238	8475	8.9	16.3239	25.7523
53,564	8245	8.1	11.0606	9.4486	54,137	8360	8.8	19.0194	11.4124	55,093	8478	8.0	17.2632	12.8688
53,603	8246	8.6	11.3385	11.0530	54,331	8363	9.0	20.2709	23.9632	55,165	8481	8.7	18.5058	18.4979
53,960	8247	9.0	11.6265	25.8551	54,248	8365	8.9	22.5007	18.8610	54,997	8482	8.9	18.9595	4.1717
53,764	8248	6.7	12.3172	18.0615	54,140	8367	8.4	23.6654	10.9685	55,045	8483	9.1	18.9675	8.8120
53,421	8249	4.8	12.6372	1.4256	54,179	8368	8.8	24.1246	13.9349	55,084	8487	8.5	19.4776	11.6647
53,519	8251	6.8	13.0398	6.9228	54,332	8369	9.2	24.2518	24.3480	55,108	8490	9.0	20.3214	13.6437
53,736	8254	8.7	13.6049	16.7324	54,333	8371	9.5	24.4172	24.5331	55,146	8492	9.2	22.5481	16.4385
53,542	8256	9.0	14.2602	8.0536	54,302	8376	8.4	25.1356	22.4719	55,174	8494	8.9	24.2485	20.3638
53,693	8258	8.5	15.1181	15.5584	54,021	8377	9.1	25.7190	2.2259	55,147	8496	9.2	24.7604	16.5783
53,582	8262	9.4	15.4328	10.0362	R.A. 19 <sup>h</sup> 32 <sup>m</sup>					55,123	8499	9.1	25.2601	14.6967
53,945	8264	9.0	16.1130	25.4332	54,588	8367	8.4	0.9476	10.9763	54,972	8500	9.1	25.4583	2.3934
53,442	8265	8.9	16.1527	3.1496	54,647	8368	8.8	1.4405	13.9373	54,983	8502	8.7	25.7005	3.4887
53,695	8266	8.4	16.4405	15.0823	54,853	8369	9.2	1.6861	24.3484	R.A. 19 <sup>h</sup> 48 <sup>m</sup>				
53,444	8269	8.5	17.6100	3.2958	54,854	8371	9.5	1.8536	24.5316	55,511	8494	8.9	1.6375	20.3644
53,445	8270	8.8	17.6681	3.2516	54,815	8376	8.4	2.5484	22.4619	55,460	8496	9.2	2.1063	16.5732
53,446	8271	8.5	17.7283	3.3108	54,416	8377	9.1	2.9017	2.2117	55,435	8499	9.1	2.5845	14.6861
53,424	8272	8.8	17.7766	1.5613	54,493	8379	9.0	3.8275	5.6950	55,272	8500	9.1	2.6430	2.3820
53,901	8274	9.1	18.3418	23.3896	54,474	8381	8.9	4.2438	4.8339	55,289	8502	8.7	2.8976	3.4745
53,570	8277	9.0	18.7900	9.2578	54,631	8382	8.5	4.8126	12.8301	55,474	8503	9.1	3.5111	17.6833
53,409	8279	8.8	19.9144	0.7627	54,816	8383	8.9	5.8116	22.5904	55,489	8504	9.1	3.7497	19.4756
53,586	8280	9.1	20.2007	10.3035	54,877	8384	8.8	5.8285	25.0581	55,338	8507	9.2	6.0620	7.8257
53,932	8281	8.7	20.1700	23.9131	54,881	8387	9.0	6.8389	24.9056	55,476	8509	8.3	6.7128	18.5983
53,682	8282	8.7	20.5064	14.4762	54,779	8389	8.7	7.4420	20.4060	55,563	8510	8.7	7.4321	24.4180
53,614	8287	7.7	21.5505	10.7591	54,837	8391	8.8	8.0565	22.7923	55,406	8511	9.0	7.7639	13.4779
53,469	8288	9.1	21.9202	3.7307	54,651	8393	8.7	8.3902	14.4957	55,452	8513	6.7	8.4385	16.5927
53,550	8290	9.0	22.1783	8.2469	54,652	8394	6.2	9.0480	13.8877	55,407	8514	9.0	8.8873	13.3959
53,720	8291	8.9	22.1767	16.0228	54,766	8395	8.7	9.7251	18.7102	55,340	8518	8.8	9.5538	8.1986
53,587	8293	7.0	22.3449	10.1205	54,480	8397	9.1	9.9662	4.8512	55,513	8519	8.6	9.6316	20.5650
53,820	8297	9.1	23.3947	19.9305	54,636	8399	8.3	10.1489	13.0683	55,496	8523	8.8	11.2073	19.2667
53,748	8299	8.8	23.9040	17.4622	54,519	8403	6.8	10.8756	6.4382	55,579	8524	9.1	11.5080	24.9551
53,532	8300	9.3	24.1944	7.1160	54,617	8405	9.0	11.3033	12.4970	55,279	8525	8.9	11.9409	3.0026
53,533	8301	9.1	24.2998	7.1799	54,701	8406	8.8	12.2853	15.8701	55,313	8529	9.1	13.7374	5.4478
R.A. 19 <sup>h</sup> 24 <sup>m</sup>					54,742	8408	8.8	13.5639	18.2165	55,514	8530	9.0	14.1910	19.9129
54,252	8297	9.1	0.7787	19.9411	54,482	8412	9.1	14.8215	5.2011	55,443	8532	7.9	14.9861	15.3453
54,207	8299	8.8	1.2600	17.4669	54,745	8415	9.0	16.3751	18.2438	55,527	8533	9.2	15.1121	21.6143
54,071	8300	9.3	1.4328	7.1181	54,844	8416	8.7	17.5761	22.9909	55,411	8535	8.7	16.4600	13.3537
54,072	8301	9.1	1.5389	7.1808	54,747	8418	8.3	18.4888	18.5086	55,501	8537	7.5	17.4612	19.6694
54,031	8311	9.1	5.0199	3.9691	54,748	8420	9.1	18.5356	17.8052	55,445	8540	8.5	19.0771	14.6713
54,219	8314	9.1	6.3714	17.8721	54,445	8426	8.3	20.0592	2.4604	55,284	8544	9.0	21.3065	3.2551
54,091	8317	7.6	6.8896	7.6240	54,541	8427	8.8	20.1134	7.5496	55,264	8545	8.7	21.6354	1.1201
54,163	8318	8.5	7.1995	12.6411	54,828	8430	9.2	21.4660	22.2539	55,326	8546	9.0	21.6232	7.1609
54,244	8322	8.4	7.9089	19.5441	54,868	8436	9.0	23.2629	24.1947	55,363	8548	8.7	22.1040	8.5475
54,093	8323	7.5	8.0798	7.7426	54,545	8440	9.2	24.9058	8.0906	55,560	8549	9.0	22.0709	22.9396
..	8326	9.0	9.1954	0.1293	54,468	8441	9.2	25.3325	3.6838	55,429	8550	9.0	23.1134	14.3470



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.
R.A. 19 <sup>h</sup> 48 <sup>m</sup> (continued)					R.A. 20 <sup>h</sup> 4 <sup>m</sup> (continued)					R.A. 20 <sup>h</sup> 20 <sup>m</sup> (continued)				
55,544	8551	8.9	23.2290	22.5510	56,094	8653	8.7	21.5395	13.2049	56,725	8765	9.0	16.0617	15.0870
55,551	8553	8.7	25.1855	7.6961	56,160	8654	8.9	21.7014	17.7008	56,622	8767	8.9	16.7452	2.3918
55,400	8554	8.7	25.6174	11.6829	56,015	8659	8.9	23.8759	9.0710	56,824	8768	9.2	16.7642	25.6981
R.A. 19 <sup>h</sup> 56 <sup>m</sup>					56,017	8660	8.5	24.2070	9.5297	56,693	8770	8.6	17.2485	11.3205
55,767	8550	9.0	0.4340	14.3611	55,913	8663	7.8	25.1506	0.7654	56,664	8771	5.8	17.5487	7.4833
55,849	8551	8.9	0.6428	22.5635	R.A. 20 <sup>h</sup> 12 <sup>m</sup>					56,648	8772	9.0	19.0971	5.6155
55,709	8553	8.7	2.4304	7.6872	56,421	8659	8.9	1.1366	9.0765	56,684	8775	9.0	20.2450	9.9629
55,742	8554	8.7	2.9076	11.6687	56,434	8660	8.5	1.4728	9.5314	56,639	8778	9.1	20.6902	4.7581
55,719	8556	8.4	3.8945	8.8292	56,351	8663	7.8	2.3168	0.7576	56,826	8780	8.8	21.1106	25.2711
55,696	8558	9.0	4.6364	6.6621	56,390	8667	7.7	3.6756	5.7881	56,623	8781	5.1	22.0020	2.7499
55,676	8561	8.5	5.2652	3.7692	56,519	8669	8.0	4.3298	19.1416	56,631	8784	7.3	22.4060	3.4628
55,852	8563	8.6	5.8392	23.4666	56,415	8674	8.9	6.3699	8.0404	56,772	8787	8.8	24.2631	18.1166
55,711	8570	8.5	9.9711	7.7582	56,488	8675	8.7	7.1552	15.5944	56,704	8788	6.9	24.7620	12.0422
55,679	8571	8.9	10.1246	3.7535	56,558	8676	9.2	8.1214	23.1553	56,705	8789	6.7	24.8262	12.0049
55,798	8576	8.0	13.6189	17.5042	56,385	8681	9.0	10.6454	5.1107	R.A. 20 <sup>h</sup> 28 <sup>m</sup>				
55,665	8577	9.3	13.7103	3.1241	56,438	8683	7.2	10.8858	9.8748	57,085	8787	8.8	1.6265	18.1173
55,666	8579	9.0	15.1840	3.1905	56,533	8686	8.5	11.7573	20.0593	56,991	8788	6.9	2.0564	12.0375
55,808	8580	9.1	15.5482	17.8100	56,410	8690	8.8	13.6538	7.2543	56,992	8789	6.7	2.1201	11.9995
55,700	8581	9.4	15.8841	6.9479	56,417	8691	8.0	13.7678	7.8820	57,149	8796	8.8	4.6133	22.4179
55,701	8582	8.9	16.0048	6.4088	56,534	8692	8.8	14.9751	20.1966	57,105	8799	8.9	5.2736	18.5528
55,702	8583	9.4	16.0257	7.0348	56,586	8694	8.7	15.2536	25.0819	56,913	8801	8.5	6.4578	6.0522
55,737	8585	7.3	16.2168	10.8756	56,373	8695	8.8	15.8831	3.0146	56,922	8802	9.1	7.6808	6.7436
55,704	8586	8.1	17.1367	7.2630	56,429	8696	7.8	15.8807	8.6270	57,118	8805	9.0	9.1141	20.3889
55,789	8587	9.3	18.2010	15.8566	56,562	8699	8.9	17.2943	23.6289	57,138	8808	8.6	11.0310	20.7370
55,773	8588	8.9	18.9077	13.8355	56,511	8701	6.4	17.5966	18.1722	56,962	8813	9.1	12.7557	9.8403
55,661	8598	9.1	22.1907	1.8221	56,512	8702	8.7	17.6042	18.3603	57,141	8815	8.7	14.2090	20.5530
55,774	8599	9.0	22.2248	13.6736	56,565	8712	9.1	20.5645	23.3039	57,154	8816	7.9	15.0069	21.8728
55,760	8600	9.0	22.7399	12.9217	56,571	8713	7.5	20.5781	24.5445	56,952	8820	8.9	17.3733	8.3555
55,681	8601	9.0	23.1501	4.3757	56,515	8715	9.0	21.6977	18.0108	57,094	8822	9.1	17.6502	18.2554
55,657	8602	8.8	24.0568	0.8367	56,413	8716	7.2	21.9802	6.6678	56,872	8823	8.6	17.8949	2.5770
55,762	8605	8.3	25.1065	12.9090	56,573	8717	9.0	21.9303	24.5070	56,868	8824	9.2	18.3022	1.8765
55,848	8606	7.0	25.4955	22.3451	56,442	8718	9.0	22.1223	10.5485	57,098	8825	8.8	18.6020	18.1694
R.A. 20 <sup>h</sup> 4 <sup>m</sup>					56,432	8719	7.3	22.3345	8.6933	56,902	8827	8.8	19.3149	4.7220
55,941	8601	9.0	0.3574	4.3893	56,465	8720	8.8	22.4751	13.6326	56,920	8833	9.2	21.9624	5.7642
55,901	8602	8.8	1.2239	0.8405	56,447	8721	8.8	23.0550	11.4739	56,874	8835	9.1	23.3335	2.3415
56,082	8605	8.3	2.4107	12.9004	56,501	8723	9.0	23.7062	17.7301	56,875	8837	9.0	23.5725	2.5508
56,239	8606	7.0	2.9068	22.3309	R.A. 20 <sup>h</sup> 20 <sup>m</sup>					57,128	8838	8.9	23.5425	20.2333
55,992	8610	8.3	3.6999	8.1467	56,696	8721	8.8	0.3430	11.4885	57,049	8840	8.8	24.5910	14.5306
56,319	8611	9.2	3.8312	25.7945	56,762	8723	9.0	1.0653	17.7371	57,050	8842	8.7	25.6864	14.7423
55,930	8613	9.1	5.1134	2.3830	56,707	8727	8.9	3.4042	13.0963	R.A. 20 <sup>h</sup> 36 <sup>m</sup>				
56,261	8614	7.8	6.0654	23.3324	56,615	8729	9.2	3.7114	2.7445	57,268	8835	9.1	0.5176	2.3533
56,200	8616	9.0	6.6664	20.4805	56,807	8732	9.2	5.6383	23.1939	57,269	8837	9.0	0.7590	2.5599
56,293	8619	8.3	7.2175	25.7897	56,669	8733	7.7	5.6064	8.9540	57,432	8838	8.9	0.9300	20.2422
55,933	8620	8.8	7.3503	3.3987	56,661	8736	8.7	6.8364	7.4422	57,368	8840	8.8	1.9136	14.5278
56,183	8621	8.7	7.4183	18.8482	56,715	8739	9.2	7.8362	13.6237	57,369	8842	8.7	3.0114	14.7269
55,981	8622	8.8	8.5248	7.4781	56,671	8742	9.0	8.6774	9.2388	57,479	8844	9.0	3.2320	23.9491
56,108	8623	7.0	8.5741	14.1220	56,798	8745	9.1	9.1942	22.1010	57,353	8846	8.8	3.7807	13.1216
56,245	8625	9.0	10.0662	22.7423	56,716	8746	9.3	9.5593	14.1337	57,299	8847	9.1	3.7940	5.8433
55,958	8626	8.6	10.3137	4.8077	56,821	8747	8.9	10.1622	25.3962	57,278	8849	9.1	4.4686	3.5558
56,227	8627	8.7	11.5939	21.4662	56,617	8750	8.7	10.9114	3.0527	57,445	8851	9.3	5.9025	21.3059
56,127	8629	9.1	12.3526	15.3091	56,799	8751	7.6	11.0286	22.0935	57,446	8852	8.1	6.0077	20.5690
56,008	8631	8.4	12.8384	8.6672	56,709	8752	9.1	11.0790	13.2969	57,488	8853	9.1	6.8124	25.2853
56,188	8635	9.1	14.0314	19.6072	56,609	8757	9.2	12.7666	1.6792	57,309	8856	5.6	8.3271	6.8958
56,229	8637	7.8	14.7774	21.0919	56,611	8758	9.0	12.8303	2.1394	57,347	8860	9.0	9.7635	11.8229
56,284	8642	9.1	17.0279	24.4193	56,823	8759	8.9	13.4331	25.5378	57,374	8861	8.6	10.4614	14.6119
55,923	8644	9.0	17.3915	2.4077	56,692	8760	8.0	13.4695	10.6981	57,273	8862	8.6	10.9829	2.8030
55,974	8649	7.6	20.1344	6.3165	56,777	8761	8.1	14.7201	18.7428	57,254	8864	8.9	12.0024	0.4458
55,999	8650	8.7	20.3978	8.4596	56,673	8762	8.6	14.8879	9.3229	57,291	8867	8.9	12.3687	5.0064



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
<b>R.A. 20<sup>h</sup> 36<sup>m</sup> (continued)</b>					<b>R.A. 20<sup>h</sup> 52<sup>m</sup> (continued)</b>					<b>R.A. 21<sup>h</sup> 8<sup>m</sup> (continued)</b>				
57,255	8869	8.9	12.4188	0.8249	57,948	8983	9.1	12.2078	3.7382	58,507	9105	8.9	16.9302	0.8592
57,407	8870	8.5	13.0580	17.9611	58,139	8984	9.1	12.4300	16.6548	58,554	9108	8.8	17.3487	7.2228
57,280	8871	8.7	13.8373	3.8420	57,932	8986	8.7	12.6849	2.4115	58,726	9112	9.1	20.5616	22.0967
57,451	8874	9.0	14.2488	20.9085	58,092	8987	9.1	12.9523	14.0493	58,734	9115	9.2	22.4376	23.6115
57,358	8875	8.9	14.5743	12.4084	58,169	8995	9.4	15.8725	19.2110	58,745	9118	8.7	23.0240	24.1040
57,310	8876	7.5	15.7736	6.6127	58,170	8996	9.3	16.6515	19.4899	58,667	9120	9.1	23.1831	16.8078
57,472	8878	8.6	16.4652	23.1436	58,142	8997	8.4	16.8763	16.6139	58,558	9123	9.1	24.0671	6.9810
57,476	8883	9.2	17.8387	23.1065	57,952	8998	8.8	17.0875	3.9888	58,569	9125	9.1	24.7339	8.1233
57,420	8885	9.0	18.0692	18.6894	58,184	8999	9.3	17.3698	19.6538	58,548	9128	6.6	25.3802	5.8872
57,316	8886	8.7	18.1494	8.0451	58,186	9000	9.3	17.6070	19.7705					
57,359	8887	9.0	18.3257	12.8491	58,156	9002	6.0	18.4339	18.0816					
57,456	8891	7.5	19.2039	21.4396	58,259	9006	8.7	19.3550	24.9727					
57,264	8892	9.1	19.3503	1.9466	58,158	9009	8.8	19.9070	17.9933					
57,410	8895	8.9	21.1360	17.8891	57,925	9010	8.9	21.4394	1.6075					
57,413	8901	9.0	23.7574	18.0300	..	9012	6.2	22.2391	0.0705					
57,429	8903	8.8	24.5144	19.4364	58,147	9014	8.3	23.6681	16.7380					
57,327	8905	8.8	25.2243	9.0244	58,014	9015	8.9	25.0603	7.6114					
57,430	8908	8.8	25.4370	19.0560	58,199	9016	8.8	25.1111	20.6911					
<b>R.A. 20<sup>h</sup> 44<sup>m</sup></b>					<b>R.A. 21<sup>h</sup> 0<sup>m</sup></b>					<b>R.A. 21<sup>h</sup> 16<sup>m</sup></b>				
57,759	8901	9.0	1.1199	18.0366	58,413	9014	8.3	1.0159	16.7456	59,055	9118	8.7	0.4555	24.1191
57,774	8903	8.8	1.8928	19.4341	58,343	9015	8.9	2.3043	7.6037	58,971	9120	9.1	0.5316	16.8210
57,645	8905	8.8	2.4843	9.0149	58,435	9016	8.8	2.5037	20.6815	58,855	9123	9.1	1.3040	6.9845
57,775	8908	8.8	2.8109	19.0429	58,324	9022	8.9	3.9838	5.3123	58,868	9125	9.1	1.9838	8.1193
57,712	8911	8.6	3.8305	15.1030	58,303	9023	9.0	3.9847	0.9601	58,846	9128	6.6	2.6045	5.8763
57,804	8913	8.1	4.2835	22.6547	58,438	9025	6.8	4.7220	20.7234	58,941	9129	8.7	3.2715	14.2961
57,602	8916	9.1	4.9742	5.3560	58,464	9027	9.1	5.2995	25.4634	58,801	9133	9.2	4.3407	0.4446
57,690	8919	8.6	6.4445	12.8498	58,439	9028	8.6	5.7405	21.5569	58,828	9143	9.1	9.1430	3.5703
57,788	8920	6.4	8.7866	20.5361	58,350	9029	8.9	5.6797	8.3891	58,975	9144	8.9	9.2543	17.2829
57,633	8923	7.7	9.4024	7.8180	58,466	9033	8.6	7.8035	25.1695	59,017	9148	8.6	12.0055	20.0752
57,634	8924	7.3	9.4499	7.8406	58,346	9036	9.1	8.1790	7.4109	58,963	9149	8.7	12.0767	15.9949
57,817	8926	9.1	10.1760	23.1888	58,335	9037	7.0	8.4068	7.0910	59,060	9151	8.7	12.2869	24.4272
57,635	8930	8.7	12.0048	8.0624	58,351	9038	8.9	8.6937	8.6784	59,019	9152	8.9	12.6839	20.3050
57,606	8931	6.7	12.0653	5.8583	58,375	9039	8.6	8.9342	12.0411	58,840	9153	9.2	13.0038	5.0076
57,842	8935	9.1	15.1683	25.7396	..	9041	8.6	9.4020	0.1478	58,956	9154	8.2	13.3448	14.9133
57,639	8937	9.3	16.2490	8.2608	58,393	9053	8.3	17.1351	14.2376	59,035	9156	9.1	14.2234	20.7905
57,582	8939	8.7	16.8493	2.5954	58,455	9054	8.9	17.4274	23.6220	59,043	9159	9.2	14.9969	21.9285
57,828	8940	9.1	16.8965	24.5544	58,425	9056	6.9	18.1819	18.8648	58,903	9162	9.0	18.1838	9.5793
57,770	8947	8.9	19.9437	18.4017	58,330	9057	8.8	18.5672	5.5582	59,065	9164	9.1	20.0549	25.5969
57,845	8948	7.4	20.1859	25.2340	58,355	9058	9.6	18.8103	8.4502	59,066	9167	9.0	21.5543	25.3415
57,708	8950	8.6	20.4877	14.4325	58,419	9063	9.0	19.6836	17.6602	58,999	9169	8.9	22.4335	17.6108
57,831	8951	8.5	20.7443	23.8774	58,417	9064	9.1	19.7053	16.9422	58,938	9176	7.9	24.6566	13.2481
57,558	8952	8.8	22.4212	0.2257	58,405	9070	8.8	22.0240	14.5908					
57,783	8956	6.9	23.8582	18.9282	58,382	9071	9.1	22.3450	13.3521					
57,667	8958	8.8	24.4426	10.1543	58,371	9076	9.2	24.0036	10.9317					
57,757	8960	7.9	25.4658	17.5301										
<b>R.A. 20<sup>h</sup> 52<sup>m</sup></b>					<b>R.A. 21<sup>h</sup> 8<sup>m</sup></b>					<b>R.A. 21<sup>h</sup> 24<sup>m</sup></b>				
58,161	8956	6.9	1.2309	18.9335	58,593	9076	9.2	1.2854	10.9357	59,226	9176	7.9	1.9647	13.2446
58,027	8958	8.8	1.7156	10.1534	58,595	9078	8.8	3.7235	11.4011	59,143	9179	9.0	3.3298	5.2192
58,150	8960	7.9	2.8225	17.5168	58,582	9079	7.9	4.2113	9.8674	59,177	9180	8.7	3.5792	7.9936
58,121	8962	8.7	4.0871	15.7665	58,674	9081	9.2	5.5131	17.9238	59,144	9183	8.9	4.3498	4.7480
58,002	8965	8.8	4.5422	7.3656	58,542	9082	9.0	6.9269	6.3528	59,169	9185	9.2	5.5345	6.8324
58,103	8967	6.8	4.7501	15.0891	58,565	9086	9.0	8.5391	8.3775	59,205	9186	8.9	5.6316	10.9102
57,961	8968	6.0	4.8744	4.6425	58,600	9088	9.1	10.4164	10.8540	59,293	9187	8.1	5.7454	18.8985
58,138	8971	9.1	6.6881	16.9016	58,677	9092	9.3	13.3254	17.7804	59,338	9189	8.7	6.2259	21.9562
58,152	8973	9.0	7.4213	17.8800	58,505	9094	8.2	13.5327	0.7235	59,310	9192	9.2	7.7849	20.3934
58,074	8974	8.2	7.4986	12.5558	50,506	9097	8.5	14.0695	1.2752	59,241	9196	9.2	9.9365	14.2260
58,153	8976	8.5	8.4615	17.9864	58,653	9098	9.2	14.3079	16.2127	59,376	9200	8.8	11.4928	24.7281
58,107	8982	8.8	11.6913	15.0144	58,533	9100	8.5	15.5876	4.8256	59,200	9203	9.1	13.7053	10.4484
										59,314	9204	7.2	14.0769	20.0095
										59,182	9205	9.0	17.6470	7.8385
										59,342	9207	9.0	17.9126	22.1668
										59,330	9208	7.9	18.1171	21.1301
										59,193	9212	9.1	20.2265	9.1880
										59,289	9213	9.0	20.7628	18.6406
										59,233	9217	9.0	22.1600	13.2677
										59,234	9221	8.5	23.3024	13.1466
										59,303	9223	9.1	23.7710	18.8413
										59,152	9226	9.0	25.2902	4.7713



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.	Hyd.	Algiers.		ξ.	η.
R.A. 21 <sup>h</sup> 32 <sup>m</sup>					R.A. 21 <sup>h</sup> 48 <sup>m</sup> (continued)					R.A. 22 <sup>h</sup> 4 <sup>m</sup> (continued)				
59,533	9221	8.5	0.6094	13.1584	60,207	9331	9.1	6.9275	16.8202	60,601	9433	9.2	19.2037	13.3094
59,603	9223	9.1	1.1426	18.8477	60,185	9332	6.6	7.7381	14.0746	60,553	9435	9.1	19.6168	6.5974
59,439	9226	9.0	2.5018	4.7614	60,208	9334	8.9	8.0740	16.7159	60,570	9436	9.2	21.0645	8.4748
59,627	9229	8.7	4.2462	20.6995	60,241	9335	9.0	9.0031	20.2360	60,554	9437	8.7	21.8010	7.2760
59,430	9230	9.0	4.3955	4.1112	60,273	9337	7.9	10.5182	24.9101	60,592	9444	9.0	25.0317	12.4374
59,628	9238	8.3	6.5678	21.2920	60,153	9338	9.1	10.8677	11.1142	R.A. 22 <sup>h</sup> 12 <sup>m</sup>				
59,556	9239	8.5	7.1996	15.6072	60,154	9339	9.2	10.8944	11.2338	60,804	9444	9.0	2.3306	12.4297
59,510	9243	8.3	9.5980	11.0742	60,242	9342	8.6	11.5413	20.4458	60,859	9447	7.4	4.1241	21.9420
59,477	9244	9.2	9.9252	8.1212	60,065	9343	9.1	12.9463	1.2562	60,760	9451	9.0	4.7941	3.9119
59,547	9247	9.1	10.5167	14.2692	60,067	9348	8.7	14.9960	1.6016	60,817	9452	8.8	5.2718	15.2861
59,553	9248	7.5	11.2750	15.2840	60,141	9350	8.9	18.2582	9.5638	60,826	9454	9.2	5.5802	16.5440
59,667	9249	4.7	11.5387	23.9729	60,262	9352	8.9	18.7778	23.5268	60,787	9460	9.1	8.0730	8.6562
59,524	9252	8.0	12.3642	11.6431	60,269	9355	8.9	21.2093	24.1217	60,754	9464	9.2	9.3771	1.1602
59,632	9254	7.8	13.1041	21.1584	60,103	9361	7.4	22.2807	5.4838	60,788	9468	8.4	13.2591	8.9393
59,693	9255	9.1	13.2973	25.8042	60,253	9362	7.5	23.0132	21.0147	60,781	9471	8.9	14.8486	6.7799
59,500	9257	8.9	14.2440	10.4234	60,199	9363	9.0	23.2578	15.2933	60,753	9481	9.1	20.1975	0.6045
59,557	9258	8.6	16.1489	14.6192	60,218	9364	8.7	23.6787	17.4906	60,856	9482	8.9	21.6256	21.4865
59,696	9259	7.8	16.4956	25.9118	R.A. 21 <sup>h</sup> 56 <sup>m</sup>					60,807	9485	8.7	24.2042	13.1524
59,528	9261	9.0	18.2940	11.6043	60,432	9362	7.5	0.4096	21.0299	R.A. 22 <sup>h</sup> 20 <sup>m</sup>				
59,512	9262	9.0	18.4714	11.4305	60,388	9363	9.0	0.5892	15.3056	60,993	9485	8.7	1.5112	13.1541
59,637	9263	8.8	18.4663	21.0201	60,409	9364	8.7	1.0351	17.4979	61,069	9489	7.8	3.2459	24.2781
59,480	9264	9.2	18.6323	7.7414	60,318	9367	9.0	3.3051	2.1852	61,061	9491	8.7	5.0741	23.2723
59,529	9267	8.8	20.4439	11.6185	60,445	9370	9.0	4.2254	23.3443	60,914	9498	7.4	10.5512	2.1942
59,586	9268	7.5	21.5111	17.2032	60,383	9371	8.9	4.2654	13.4512	61,019	9500	9.2	12.3677	18.1732
59,419	9269	9.3	21.6099	1.6522	60,446	9374	8.7	6.1932	22.6050	60,981	9506	8.8	14.8562	11.3632
59,408	9271	9.0	23.4338	1.0618	60,340	9378	8.1	7.1998	6.6943	60,908	9507	8.9	15.0914	1.3147
R.A. 21 <sup>h</sup> 40 <sup>m</sup>					60,353	9379	9.4	7.5541	9.1519	60,996	9508	8.7	15.4256	13.8678
59,752	9271	9.0	0.6034	1.0724	60,442	9385	8.8	12.1804	22.5145	60,953	9510	8.0	15.4778	7.1970
59,923	9278	5.7	4.7188	16.8835	60,304	9386	7.8	12.5139	0.9582	60,910	9511	8.9	15.9806	1.3520
59,842	9280	8.8	5.4289	10.1251	60,305	9389	8.9	13.8255	0.2304	60,920	9512	8.9	16.1666	3.6760
60,020	9283	6.8	6.3249	25.9447	60,335	9391	6.6	14.9749	5.6037	61,003	9513	9.2	16.7043	14.9174
59,888	9286	8.7	8.2359	13.5634	60,330	9397	8.3	20.6875	4.5811	60,926	9514	9.2	17.4179	4.4830
60,001	9287	8.4	8.6081	24.6015	60,316	9400	9.4	22.3505	1.4969	61,065	9515	8.5	17.5051	23.1804
59,828	9288	8.9	8.6165	8.6773	60,427	9401	8.7	22.5101	19.7468	61,056	9518	9.0	17.8342	22.2453
60,012	9291	9.0	10.0571	24.8295	60,408	9402	9.1	23.5250	16.8530	61,074	9519	8.8	17.9535	24.4312
59,769	9292	9.4	10.0381	2.4236	60,323	9403	9.1	23.7843	3.2154	60,921	9520	9.1	18.7092	3.1844
59,880	9296	9.1	12.4588	13.4464	60,394	9404	8.3	25.1998	14.8927	60,962	9523	8.8	20.5189	8.7595
59,798	9297	8.8	13.8880	6.3167	60,417	9406	9.0	25.4668	18.0512	61,011	9526	8.9	22.6465	15.8200
59,800	9298	7.9	15.6388	5.5801	60,349	9407	9.2	25.5677	8.0636	R.A. 22 <sup>h</sup> 28 <sup>m</sup>				
59,821	9299	9.0	16.2241	8.4012	R.A. 22 <sup>h</sup> 4 <sup>m</sup>					61,171	9530	9.0	3.5099	12.0697
59,857	9300	8.6	16.7484	11.3198	60,623	9402	9.1	0.8741	16.8623	61,124	9531	8.7	5.1275	4.2797
59,945	9303	8.6	18.1419	19.1947	60,520	9403	9.1	0.9783	3.2222	61,232	9532	8.9	5.7461	21.4002
60,014	9306	7.9	18.9422	25.4937	60,613	9404	8.3	2.5265	14.8827	61,182	9533	9.2	6.5637	13.3141
59,917	9307	8.7	19.0443	16.4643	60,630	9406	9.0	2.8294	18.0379	61,243	9534	9.3	6.6972	24.9855
59,835	9308	7.5	19.2750	9.1254	60,556	9407	9.2	2.8168	8.0503	61,116	9538	9.0	9.4164	2.9187
59,860	9310	8.9	20.8083	10.9858	60,711	9409	8.0	7.1195	25.6948	61,107	9539	7.0	12.0047	1.1827
59,993	9313	8.9	21.7935	23.5314	60,539	9413	8.4	8.4385	6.0375	61,238	9540	9.1	12.1579	23.8708
59,864	9317	7.5	23.7605	11.2500	60,533	9414	8.1	9.4792	4.8629	61,101	9541	8.6	12.1622	0.3811
59,896	9318	8.9	24.3715	13.9572	60,667	9415	8.8	9.7548	19.8879	61,234	9542	9.1	12.7130	22.3063
59,897	9319	9.3	24.3878	14.4580	60,542	9417	9.3	11.5243	5.6686	61,125	9543	8.0	12.9217	4.4393
59,907	9322	8.9	25.6011	15.0228	60,597	9418	6.0	11.5837	13.1098	61,239	9544	8.5	15.0010	23.5422
R.A. 21 <sup>h</sup> 48 <sup>m</sup>					60,599	9419	8.6	11.9167	12.6913	61,199	9545	8.5	15.1739	15.4292
60,146	9317	7.5	1.0458	11.2568	60,652	9420	9.0	12.5357	18.7340	61,224	9546	8.5	15.7793	19.7985
60,181	9318	8.9	1.6874	13.9568	60,585	9421	8.7	12.9636	12.2920	61,113	9547	8.8	16.1809	1.2780
60,182	9319	9.3	1.7096	14.4574	60,543	9424	9.1	14.2915	5.7491					
60,192	9322	8.9	2.9292	15.0083	60,552	9425	8.2	14.7779	6.8153					
60,129	9324	9.2	3.6358	8.9301	60,640	9431	9.2	18.1402	18.0125					
60,109	9326	9.0	4.8228	6.7698	60,616	9432	9.2	18.5520	14.9308					



Reference No. Mag. Standard co-ordinates, 1900-0					Reference No. Mag. Standard co-ordinates, 1900-0					Reference No. Mag. Standard co-ordinates, 1900-0				
Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.		Hyd.	Algiers.	ξ.	η.	
<b>R.A. 22<sup>h</sup> 28<sup>m</sup> (continued)</b>					<b>R.A. 22<sup>h</sup> 52<sup>m</sup> (continued)</b>					<b>R.A. 23<sup>h</sup> 08<sup>m</sup> (continued)</b>				
61,153	9550	8.8	16.6782	8.8100	61,797	9653	7.0	3.7634	21.5086	62,041	9770	7.8	24.0078	9.5621
61,176	9552	8.6	17.9840	12.2052	61,792	9654	9.3	4.7484	19.9371	62,092	9771	9.2	24.1594	16.8365
61,129	9554	8.3	19.3199	4.9400	61,818	9657	9.1	6.1946	23.1315	62,093	9772	9.1	25.5447	16.6141
61,118	9555	6.9	19.5181	2.6637	61,731	9662	9.1	9.5733	11.8136					
61,102	9556	6.5	19.9378	0.7281	61,733	9762	8.6	14.7810	11.8045					
61,114	9558	9.3	20.9217	1.0726	61,787	9673	8.1	15.0234	19.0882					
61,157	9561	8.8	21.9531	8.9047	61,765	9674	8.9	15.1125	15.8944					
61,169	9562	7.7	22.1401	10.4880	61,675	9675	8.2	15.3809	3.7368					
61,209	9565	9.0	23.0106	17.8754	61,734	9676	8.6	15.4684	12.1118					
					61,761	9678	9.2	17.1440	14.7290					
					61,821	9685	7.5	23.1279	23.6345					
					61,815	9686	9.2	23.9535	21.7481					
					61,729	9687	8.8	24.7631	11.1423					
					61,721	9688	9.2	25.5235	10.0494					
<b>R.A. 22<sup>h</sup> 36<sup>m</sup></b>					<b>R.A. 23<sup>h</sup> 0<sup>m</sup></b>					<b>R.A. 23<sup>h</sup> 16<sup>m</sup></b>				
61,392	9565	9.0	0.3713	17.8906	61,981	9685	7.5	0.5541	23.6482	62,258	9768	7.4	0.8423	18.0667
61,393	9572	9.2	5.4893	17.6142	61,976	9686	9.2	1.3582	21.7520	62,200	9770	7.8	1.2740	9.5661
61,402	9573	9.3	6.0392	19.0629	61,904	9687	8.8	2.0473	11.1378	62,250	9771	9.2	1.5083	16.8384
61,324	9574	8.7	6.5558	4.8280	61,899	9688	9.2	2.7951	10.0364	62,252	9772	9.1	2.8910	16.5999
61,417	9576	8.7	8.0943	20.7536	61,919	9691	8.9	3.9157	13.9753	62,259	9774	7.0	5.1377	17.6781
61,333	9578	9.1	8.9775	6.7651	61,986	9692	8.8	3.9699	24.6796	62,220	9775	9.0	5.2776	12.2696
61,423	9579	7.2	9.1655	21.6216	61,956	9693	8.6	4.4420	18.7963	62,242	9777	9.2	7.0574	15.9163
61,326	9580	8.9	9.2344	4.9471	61,923	9695	7.0	5.3574	13.9674	62,193	9778	6.0	7.7119	8.4811
61,396	9583	9.4	11.1929	17.9866	61,988	9697	8.9	5.8465	24.0587	62,227	9779	8.4	7.8802	14.2298
61,371	9584	8.7	14.3273	14.0134	61,921	9699	9.1	6.7704	12.6015	62,284	9783	9.2	11.6623	22.4047
61,365	9586	8.6	14.8504	12.5112	61,984	9702	8.5	7.6131	23.2134	62,271	9784	8.1	12.0613	19.4427
61,330	9592	8.7	18.3260	5.4365	61,990	9703	9.0	7.6372	25.1839	62,229	9785	7.8	12.0852	14.0895
61,427	9593	9.0	19.0954	23.4815	61,962	9705	8.7	11.8871	20.5849	62,167	9786	8.7	12.1294	2.6034
61,388	9594	5.3	19.2457	17.2553	61,915	9708	9.1	14.0378	11.8183	62,161	9788	8.8	13.3375	1.7671
61,314	9595	8.8	19.9469	2.5024	61,931	9709	9.4	14.9200	15.3146	62,278	9797	8.3	20.0292	20.9129
61,311	9596	8.9	20.1342	1.5603	61,991	9711	8.6	16.7190	24.9866	62,183	9798	7.2	20.4848	5.0751
61,354	9597	8.6	20.3404	10.6804	61,927	9714	9.3	17.5728	14.3440	62,171	9800	8.5	21.1001	4.0029
61,429	9599	8.0	20.9623	23.5867	61,980	9717	8.6	20.7305	21.9784	62,247	9801	6.3	21.1018	15.8817
61,413	9600	8.8	21.9092	20.3885	61,947	9720	8.4	22.6978	16.5336	62,172	9804	8.5	22.4098	3.1517
61,430	9602	9.0	22.0769	22.8642	61,964	9721	9.1	22.8654	20.0592	62,290	9805	9.3	22.3892	23.5043
61,389	9603	8.6	22.9287	17.1649	61,857	9722	8.9	23.2824	0.7039	62,174	9810	8.5	23.9618	3.1473
					61,933	9725	8.7	24.6763	15.0628	62,197	9811	8.4	24.2477	8.7712
					61,975	9726	9.2	25.3542	21.3718					
<b>R.A. 22<sup>h</sup> 44<sup>m</sup></b>					<b>R.A. 23<sup>h</sup> 08<sup>m</sup></b>					<b>R.A. 23<sup>h</sup> 24<sup>m</sup></b>				
61,556	9603	8.6	0.2814	17.1810	62,001	9722	8.9	0.4480	0.7162	62,373	9810	8.5	1.1552	3.1521
61,497	9608	9.2	3.5748	8.5720	62,066	9725	8.7	2.0050	15.0588	62,403	9811	8.4	1.5049	8.7727
61,514	9610	7.8	4.8927	10.7780	62,112	9726	9.2	2.7545	21.3594	62,496	9815	8.9	4.2367	24.0985
61,459	9616	6.8	7.4484	1.9423	62,010	9727	8.8	3.2373	2.0167	62,460	9820	9.3	7.1333	17.6346
61,460	9617	8.6	7.6166	2.2711	62,077	9728	8.6	3.8845	15.9745	62,366	9822	9.4	7.6502	2.7274
61,577	9618	8.6	7.8320	21.2906	62,002	9729	8.6	3.9031	0.8950	62,498	9828	9.0	11.7782	24.2116
61,488	9620	8.3	8.0016	8.3200	62,014	9730	8.6	4.3902	3.2102	62,453	9829	9.2	12.5202	16.9808
61,500	9621	8.9	8.8476	9.0979	62,132	9731	9.3	4.6128	25.0765	62,433	9830	8.8	14.5070	13.8033
61,566	9623	9.0	9.6895	19.6670	62,011	9732	8.5	5.5622	2.2663	62,450	9837	8.5	16.9323	15.9813
61,573	9626	9.0	11.5126	20.4469	62,101	9734	9.0	6.1404	18.6001	62,396	9838	8.8	17.8908	6.9837
61,534	9627	8.8	11.6306	14.6867	62,078	9736	9.0	6.5501	16.2770	62,505	9839	8.8	18.0434	25.5140
61,521	9630	8.9	13.0222	12.1510	62,067	9737	8.8	6.6391	15.2966	62,477	9844	8.9	21.9089	20.2500
61,560	9631	9.1	13.3770	17.0570	62,043	9739	9.2	8.3577	11.0914	62,411	9846	8.5	23.3585	8.2684
61,492	9633	8.9	14.9102	7.7868	62,058	9741	9.3	9.2988	13.5421	62,378	9849	9.0	24.5191	3.1897
61,476	9635	8.9	17.3726	5.2029	62,049	9748	7.9	12.9650	11.9660	62,485	9851	8.2	25.1199	21.4087
61,551	9636	8.6	17.4467	16.2234	62,005	9751	8.5	16.0086	0.0614					
61,592	9638	8.6	19.8182	25.0103	62,097	9752	8.5	16.5264	18.0343					
61,555	9639	8.7	20.9941	16.8167	62,021	9763	9.0	21.4428	4.4130					
61,562	9640	9.0	21.0664	18.7632	62,100	9768	7.4	23.4795	18.0570					
61,571	9644	7.6	22.1836	19.8417										
61,481	9646	9.0	24.2740	5.7792										
<b>R.A. 22<sup>h</sup> 52<sup>m</sup></b>														
61,689	9646	9.0	1.4972	5.7804										
61,706	9650	8.3	3.4343	8.1136										



Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.		Reference No.		Mag.	Standard co-ordinates, 1900-0.	
Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.	Hyd.	Algiers.		ξ'.	η'.
<b>R.A. 23<sup>h</sup> 32<sup>m</sup> (continued)</b>					<b>R.A. 23<sup>h</sup> 40<sup>m</sup> (continued)</b>					<b>R.A. 23<sup>h</sup> 48<sup>m</sup> (continued)</b>				
62,654	9880	9.2	20.7995	17.6916	62,828	9913	9.0	21.6400	20.5514	63,038	9943	8.9	17.9624	21.2527
62,668	9882	7.5	22.6003	19.5306	62,817	9914	7.6	22.4440	18.2993	63,012	9944	9.2	18.0307	16.5855
62,561	9883	9.1	24.0837	2.0040						62,931	9948	7.9	19.4900	5.6352
62,635	9886	9.4	24.9267	14.1791						62,936	9949	9.0	19.8959	6.5570
62,599	9887	4.8	25.4890	7.9937						62,943	9953	8.8	21.4978	7.7759
					<b>R.A. 23<sup>h</sup> 48<sup>m</sup></b>					62,978	9961	9.1	24.7649	12.4515
<b>R.A. 23<sup>h</sup> 40<sup>m</sup></b>					62,981	9920	9.2	3.7531	12.5911	<b>R.A. 23<sup>h</sup> 56<sup>m</sup></b>				
62,706	9883	9.1	1.2640	2.0074	..	9921	8.7	4.5457	0.1995	63,165	9961	9.1	2.0639	12.4468
62,784	9886	9.4	2.2453	14.1724	62,961	9925	7.2	6.2294	11.1817	63,181	9971	8.5	7.4675	14.1620
62,738	9887	4.8	2.7372	7.9813	62,902	9926	9.1	6.5956	0.6174	63,183	9975	8.7	9.3262	13.7711
62,727	9890	5.3	3.2408	5.4777	63,029	9927	9.0	7.3196	20.2774	63,262	9977	8.8	9.7925	25.6694
62,848	9891	8.3	3.8108	24.4321	62,928	9928	5.0	7.8843	18.5898	63,140	9979	8.3	10.0826	7.8361
62,764	9896	6.0	10.2051	10.9867	62,928	9930	8.8	8.4570	6.0515	63,254	9980	8.4	10.2947	24.6648
62,810	9897	9.1	11.2662	17.0775	63,003	9931	8.7	9.4806	15.6161	63,227	9984	9.2	13.3034	19.7792
62,728	9898	9.2	11.5708	6.3160	62,903	9932	9.1	10.2613	0.5184	63,265	9987	9.0	17.3219	25.0115
62,806	9903	6.8	15.3270	15.8127	62,941	9933	8.0	10.6317	7.9780	63,109	9990	8.7	20.0821	2.1723
62,811	9905	9.1	17.1757	16.7324	62,954	9934	8.9	10.7763	10.1962	63,106	9992	8.8	21.9523	0.7928
62,833	9907	8.8	18.4969	21.7076	62,994	9935	7.6	11.6002	14.4175	63,266	9994	8.7	22.8368	24.9605
62,860	9908	8.8	18.4927	23.9312	62,964	9937	8.8	13.9413	10.8425	63,261	9996	8.7	23.6243	24.6598
62,735	9912	8.8	19.7014	6.9901	62,957	9941	9.1	14.6863	10.2240	63,157	9997	8.6	23.8979	9.8250
					62,975	9942	7.8	14.7382	12.0557					































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